EMC® Input*Accel*®

Version 6.0

Installation Guide
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Table of Contents

List of Tables

Chapter 1

InputAccel overview

This guide explains how to install an InputAccel document capture system. This section provides a quick overview intended for those who will actually install InputAccel. For a comprehensive description of how InputAccel works, refer to the System Overview. This is a remark!!!

InputAccel is a client/server document capture system that can capture documents from scanners, fax servers, email servers, and file systems, as well as from third-party systems by using web services. InputAccel is optimized for *capturing documents*, not storing them for long term access. Typically, documents remain in an InputAccel system for a few hours to a few days, until they are exported to a content repository or other back-end system. The speed and capacity of processing, memory, and disk storage systems for InputAccel Servers should take into consideration the short-term life cycle of captured documents.

InputAccel is modular and scalable; therefore, installation complexity depends on the capabilities selected by your organization. Various system configuration examples are provided in Sample configurations, page 47. Different InputAccel components have different hardware and software requirement, as explained in detail in Chapter 2, System requirements and recommendations. All installations require an InputAccel Database hosted by Microsoft SQL Server, as well as an Administration Console web application installed on a server running Microsoft Internet Information Services (IIS).

Installing InputAccel requires you to proceed logically through several phases. The following is a brief list of general installation steps. For detailed installation planning, refer to Chapter 3, Installation planning.

- Database: Install one instance of the InputAccel Database on a computer running Microsoft SQL Server.
- InputAccel Server: Install at least one instance, possibly more for a ScaleServer or cluster configuration.
- Administration Console: This component is hosted by IIS and is required to perform InputAccel system administration. Install one instance.
- InputAccel Remoting: Hosted by IIS and required to support remote users connecting to the InputAccel system over the Internet. Install one instance only if you are supporting operators who will be connecting from a remote location over the Internet.
- InputAccel clients: Install specific client modules on attended and unattended workstations. Install multiple instances of modules that have been identified as potential bottlenecks. Most unattended modules may optionally run as services. Certain attended modules may be deployed by ClickOnce and configured to connect by HTTP.
- InputAccel Web Services subsystem: Install if using InputAccel as a web services provider or requester.

- ClickOnce deployment: Hosted by a file share or IIS. Deploy certain attended modules to local or remote users. Installed as part of the client installation phase. Configure after installation is complete.

Related Topics —

Chapter 2, System requirements and recommendations
Chapter 3, Installation planning
Chapter 5, Upgrading InputAccel

Chapter 2

System requirements and recommendations

This chapter includes the following sections outlining the system requirements and recommendations for running various InputAccel components:

Database server requirements

This section lists the system requirements and recommendations for the computer running InputAccel Database.

Table 1. Database server requirements

Item	Recommended	Minimum
Hardware requirements		
CPU	2.0 GHz Pentium (or compatible) 2 cores	2.0 GHz Pentium (or compatible) 2 cores
Hard drive	10 GB Free	10 GB Free
RAM	4 GB - 8 GB	2 GB
DVD-ROM	Optional	Optional
Network card	Platform compatible with TCP/IP with transmission rate of 1000 MBit/sec	Platform compatible with TCP/IP with transmission rate of 100 MBit/sec
Display	1024 x 768, 256 colors	1024 x 768, 256 colors

Item	Recommended	Minimum
Software requirements		
Operating system	Windows Server 2003 R2 SP2 or Windows Server 2003 SP2 (64-bit edition), to enable SQL Server to use more than 3 GB RAM: • Datacenter, Enterprise, or Standard edition • 64-bit	Windows Server 2003 R2 SP2 or Windows Server 2003 SP2: • Standard edition • 32-bit
InputAccel Database	Microsoft .NET 2.0 SP1: Required for purging capabilities	Microsoft .NET 2.0 SP1: Required for purging capabilities
SQL Servers	SQL Server 2005 SP2 version 9.00.3042	SQL Server 2005 SP2 version 9.00.3042

Related Topics —

Chapter 3, Installation planning
Database server considerations, page 23
Installing the InputAccel Database, page 56
Database issues, page 136

InputAccel Server requirements

This section lists the system requirements and recommendations for the computer running the InputAccel Server.

Table 2. InputAccel Server requirements

Item	Recommended	Minimum
Hardware requirements		
CPU	2.0 GHz Pentium (or compatible) 4 cores	2.0 GHz Pentium (or compatible) 2 cores
Hard drive	10 GB Free	10 GB Free
RAM	4 GB	2 GB
DVD-ROM	Optional	Optional
Network card	Platform compatible with TCP/IP with transmission rate of 1000 MBit/sec	Platform compatible with TCP/IP with transmission rate of 100 MBit/sec
Display	1024 x 768, 256 colors	1024 x 768, 256 colors

Item	Recommended	Minimum
Software requirements		
Operating system	Windows Server 2003 R2 SP2 or Windows Server 2003 SP2: • Standard edition • 64-bit edition, to enable InputAccel Server to use up to 4 GB RAM **Note:** On a 64-bit operating system, InputAccel functions as a 32-bit application using WOW64. Refer to the Microsoft website for details about WOW64.	Windows Server 2003 R2 SP2 or Windows Server 2003 SP2: • Standard edition • 32-bit
Additional software	Adobe Reader: Required to view documentation that is in PDF format.	Adobe Reader: Required to view documentation that is in PDF format.

Related Topics —

InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
Installing the InputAccel Server, page 58
Upgrading the InputAccel Server, page 120
ScaleServer issues, page 137

InputAccel web components and ClickOnce host requirements

This section lists the system requirements and recommendations for the computer running the InputAccel web components and the computer hosting the ClickOnce packages. InputAccel web components include Administration Console and InputAccel Remoting.

Caution:

- Administration Console and InputAccel Remoting must not be installed on the same computer.

Table 3. InputAccel web components and ClickOnce host requirements

Item	Recommended	Minimum
Hardware requirements		
CPU	2.0 GHz Pentium	2.0 GHz Pentium (or compatible)
Hard drive	2 GB Free	2 GB Free

Item	Recommended	Minimum
RAM	1 GB	512 MB
DVD-ROM	Optional	Optional
Network card	Platform compatible with TCP/IP with transmission rate of 1000 MBit/sec	Platform compatible with TCP/IP with transmission rate of 100 MBit/sec
Display	1024 x 768, 256 colors	1024 x 768, 256 colors
Software requirements		
Operating system	• Windows Server 2003 R2 SP2 or Windows Server 2003 SP2: — Datacenter, Enterprise, or Standard edition — 64-bit **Note:** On a 64–bit operating system, InputAccel functions as a 32-bit application using WOW64. Refer to the Microsoft website for details about WOW64.	• Windows Server 2003 R2 SP2, or Windows Server 2003 SP2: — Standard edition — 32-bit
Additional software	• Microsoft Internet Explorer 7.0 • Microsoft IIS 6.0 • Microsoft .NET 2.0 SP1 • Adobe Reader must be installed on the same workstation as Administration Console to print or export reports.	• Microsoft Internet Explorer 7.0 • Microsoft IIS 6.0 • Microsoft .NET 2.0 SP1 • Adobe Reader must be installed on the same workstation as Administration Console to print or export reports.

Related Topics —

Chapter 3, Installation planning
Installing the Administration Console, page 60
Administration Console host system considerations, page 24
ClickOnce host system considerations, page 25
InputAccel Remoting server considerations, page 25
Installing InputAccel Remoting, page 83

Client workstation requirements

This section lists the hardware and software requirements and recommendations that are common for all client computers running InputAccel client modules. It also lists specific requirements for specific InputAccel client modules.

Topics in this section include:

Common requirements for all client modules

This section lists the common system requirements for all InputAccel client modules.

Table 4. Common client module requirements

Item	Recommended	Minimum
Hardware requirements		
CPU	CPU-intensive tasks such as scanning, image enhancement, and optical character recognition: • 2.0 GHz Pentium (or compatible), 2 cores. Less CPU-intensive tasks such as exporting, indexing, image quality assurance, data verification and validation, and InputAccel administration: • 2.0 GHz Pentium or (compatible).	2.0 GHz Pentium (or compatible)
Hard drive	2 GB free	2 GB free
RAM	• Microsoft Windows XP: 1 GB • Windows Server 2003: 3 GB • Microsoft Windows Vista: 3 GB	• Microsoft Windows XP: 512 MB • Windows Server 2003: 2 GB • Microsoft Windows Vista: 2 GB
DVD-ROM	Optional	Optional
Network card	Platform compatible with TCP/IP with transmission rate of 1000 MBit/sec	Platform compatible with TCP/IP with transmission rate of 100 MBit/sec

Item	Recommended	Minimum
Display	1024 x 768, 256 colors	1024 x 768, 256 colors
Software requirements		
Operating system	• Windows XP SP2 • Windows Server 2003 R2 SP2, or Windows Server 2003 SP2: — Datacenter, Enterprise, or Standard edition — 64-bit **Note:** On a 64-bit operating system, InputAccel functions as a 32-bit application using WOW64. Refer to the Microsoft website for details about WOW64. • Vista Enterprise x32 SP1, Vista Enterprise x64 SP1, or Vista Business x32 SP1	• Windows XP SP2 • Windows Server 2003 R2 SP2, or Windows Server 2003 SP2: — Standard edition — 32-bit • Windows Vista Enterprise x32 SP1, Vista Enterprise x64 SP1, or Vista Business x32 SP1
Additional software	Adobe Reader: Required to view documentation that is in PDF format.	Adobe Reader: Required to view documentation that is in PDF format.

Related Topics —

Chapter 3, Installation planning
Appendix A, InputAccel client modules
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Installing the InputAccel Client Components, page 62
Upgrading client modules, page 123

Module-specific requirements

This section lists the additional requirements for specific InputAccel client modules. These requirements and the Common requirements for all client modules, page 15 are required before installing these client modules.

Table 5. Module–specific requirements

Module	Microsoft Internet Explorer	Additional requirements
ApplicationXtender Export	-	• EMC ApplicationXtender 5.3 or 5.4 • EMC ApplicationXtender Desktop 5.3 or 5.4
Archive Export	-	• SAP ERP Central Component (ECC) 5.0 • ECC 6.0 SP2
Documentum Advanced Export	-	• Content Server 5.3 Service Pack 5, 6.0 SP1, or 6.5 • Documentum Foundation Classes (DFC) 5.3 SP5, 6.0 SP1, or 6.5 run time environments — DFC runtime components use the `C:\Documentum` directory to store client data. By default, members of the local users group do not have write permission to this directory. The Documentum administrator must grant write permissions for this directory to Documentum Advanced Export operators. — DFC creates a unique "`dmcl`" directory where the module or client-side script is running. Members of non-administrator groups need, but by default do not have, write permissions to this directory and its subdirectories. Without this permission, DFC will not work correctly and may cause exceptions. The Documentum administrator must grant module operators write permissions to each instance of the `dmcl` directory. • Microsoft Visual Studio 2005 (recommended to write scripts)
ECM Web Services Importer Configuration	6.0	IIS 6.0 with support for ASP pages enabled
FileNet Content Manager Export	-	FileNet P8 Content Manager 3.5 or 4.0
FileNet Panagon IS/CS Export	-	Requires one of the following: • FileNet Panagon Content Services 5.4 • FileNet Panagon Image Services 4.0.40
Global 360 Export	-	Execute360 with eiStream Client Components 9.2.1
IBM CSSAP Export	-	DB2 Content Manager CommonStore for SAP 8.3

Module	Microsoft Internet Explorer	Additional requirements
IBM CMIP-390 Export	-	DB2 Content Manager ImagePlus for OS/390
IBM CM Advanced Export	-	Requires one of the following: • DB2 Content Manager for z/OS 8.3 SP 5 • DB2 Content Manager for z/OS 8.4
IndexPlus	7.0	• Microsoft Visual Studio 2005 (recommended to write scripts) • Adobe Reader: To view PDF files in the **Image View** pane • Microsoft Excel: To view XLS files in the **Image View** pane The ODBC functions that are accessed through the LegacyValidation script are compatible with the databases listed for the ODBC Export module.
MS SharePoint Export	-	Requires one of the following: • SharePoint Portal Server 2003 • Office SharePoint Server 2007
ODBC Export	-	Supports the following databases: • Oracle 11g • Oracle 10g • Oracle 9i (Oracle ODBC Driver 9.02.00.02) • IBM DB2 9.5 • Microsoft SQL Server 2000 • Microsoft SQL Server 2000 SP 4 • Microsoft SQL Server 2005 SP 2
Open Text Livelink Advanced Export	-	Connects to Livelink Server 9.5 or 9.7

Module	Microsoft Internet Explorer	Additional requirements
PrimeOCR Plus	-	No additional software required; however, when installed on a 64-bit Windows platform, Data Execution Prevention (DEP) must be disabled for certain programs to prevent slow/no performance and excessive memory use. Do either of the following: • Enable DEP for essential Windows programs and services only. • Enable DEP for all programs and services except the following: — `c:\Program Files\InputAccel\Client\binnt\icrsrv32.exe` — `c:\Program Files\InputAccel\Client\binnt\xocr32b.exe` — `c:\Program Files\InputAccel\Client\binnt\procr8.exe` (Substitute your InputAccel installation directory for "`c:\Program Files\InputAccel`" in these path names.)
RescanPlus	7.0	• Microsoft Visual Studio 2005 (recommended to write scripts) • Adobe Reader: To view PDF files in the **Image View** pane • Microsoft Excel: To view XLS files in the **Image View** pane
ScanPlus	7.0	• Microsoft Visual Studio 2005 (recommended to write scripts) • Adobe Reader: To view PDF files in the **Image View** pane • Microsoft Excel: To view XLS files in the **Image View** pane
Script Engine	-	Microsoft Visual Studio 2005 (recommended to write scripts)
Values to XML	6.0	-

Related Topics —

Chapter 3, Installation planning
Common requirements for all client modules, page 15
Appendix A, InputAccel client modules
Installing the InputAccel Client Components, page 62
Upgrading client modules, page 123

Scanning workstation requirements

In addition to the standard software and hardware required for all InputAccel client modules, there are additional system requirements for a scanning workstation. The throughput of the scanning device that is used with InputAccel should be taken into account when matching it to the host ScanPlus client. We recommend that you use these guidelines for minimum hardware requirements for the system.

Note: For information about supported scanners and SCSI adapters, refer to www.scannerdrivers.com.

ISIS Driver Level	Throughput (IPM, images per minute)	Minimum Pentium CPU	Minimum RAM
Level 1	Up to 20 IPM (binary)	300 MHz	64 MB
Level 1	Up to 20 IPM (color)	450 MHz	96 MB
Level 2	Up to 50 IPM (binary)	300 MHz	64 MB
Level 2	Up to 50 IPM (color)	900 MHz	128 MB
Level 3	Up to 100 IPM (binary)	450 MHz	64 MB
Level 3	Up to 100 IPM (color)	1.2 GHz	256 MB
Level 4	Up to 100 IPM (binary)	600 MHz	96 MB
Level 4	Up to 100 IPM (color)	2.4 GHz	512 MB

Related Topics —

Chapter 3, Installation planning
Common requirements for all client modules, page 15

Chapter 3

Installation planning

Performing a successful InputAccel installation depends on having a good installation plan. There are several topics to consider before installing InputAccel. Topics in this section include:

- General considerations, page 21
- Sample configurations, page 47

General considerations

When planning an enterprise InputAccel installation, you need to plan carefully and consider several different kinds of issues: hardware, software, networking, security, system availability, backup, recovery, and more. The following table summarizes many of these issues and directs you to more information.

Item	Planning activity
Performance	An enterprise document capture system should be able to keep up not only with the data coming into the system, but also the data being processed through the system. (Performance and throughput, page 22.)
Scalability	Decide whether to install the entire system at once or start with a small system and then expand. InputAccel supports both server and client scalability. (Scalability, page 29.)
Security	Carefully consider your security implementation. Your plan should cover the security providers relative to local and remote administrators, local and remote operators, the SQL Server that hosts the InputAccel Database, and security within IIS and Internet Explorer. (Security, page 31.)
Network configuration	Determine how InputAccel will fit into your network topology. InputAccel can be deployed to a single domain, multiple domains, or to a single, standalone computer. (Installing InputAccel across multiple domains, page 36.)
High availability and failover	Perform an appropriate level of planning to keep your document capture system online and productive at all times. This might be as simple as an extra InputAccel Server configured as a ScaleServer group to provide load balancing, using the Input Management Console to monitor and respond to issues and failures, or as complex as configuring a Microsoft Cluster Service (MSCS) cluster sharing a Storage Area Network (SAN) to provide an automated response to hardware failures. (High availability and failover, page 38.)

Item	Planning activity
Disaster recovery	Prepare a disaster plan with attention to restoring your document capture operation and keeping your organization productive after various types of disasters. This may be as simple as routine backups with offsite storage or as complex as multiple MSCS clusters in both local and remote locations with replicated Storage Area Networks to provide an automated response to hardware failures, enabling you to keep production active at all times. (Disaster planning, page 40.)
Deployment	Think about how you want to install InputAccel software. For example, you may need to deploy parts of InputAccel to 50 computers, and you probably will not want to manually run **`setup.exe`** on each of them. Rather than using the traditional interactive installer, consider using automated "push" installations by taking advantage of the command-line installation interface. For certain modules, consider using the included ClickOnce Deployment Utility to create deployment packages, and then letting your operators install the software themselves. ClickOnce has the additional advantage of facilitating automatic updates. (Deployment, page 43.) Consider system requirements for each component. Different InputAccel components have different requirements: for example, the InputAccel Database has different hardware and software requirements than the Administration Console web server. (Chapter 2, System requirements and recommendations.)
Licensing and activation	EMC offers many different licensing plans to meet the needs of different types of customers. You must obtain license codes for each InputAccel Server and use either a hardware security key attached to each of your InputAccel Servers or a software activation file issued by EMC. (Licensing and activation, page 44.)
Compatibility	Consider the various technologies you can use when deploying InputAccel. InputAccel has been designed and tested for VMware support, Citrix compatibility, support for IPv6, and support for assistive technology according to the requirements of Section 508 of the Rehabilitation Act of 1973. (Compatibility, page 46.)

Performance and throughput

Maximizing performance and throughput are key objectives when designing an InputAccel system. Many factors affect performance and throughput, but at the top of the list are the server processors, their disk systems, and the network to which they connect. This is the InputAccel infrastructure. If you correctly plan the infrastructure for your InputAccel installation, you can take advantage of the modularity of InputAccel. This modularity enables you to adjust the InputAccel configuration to meet your actual production needs after observing the system in production mode for a period of time. You can add more modules, more workstations, more InputAccel Servers, and more operators as needed until you meet your production goals.

To maximize the performance and throughput at all points in your InputAccel system, you should consider each of the following components individually:

Database server considerations

The computer that hosts the InputAccel Database runs SQL Server 2005. It must service queries and store batch and task data from each InputAccel Server, each client module, and each running instance of the Administration Console. In addition, it must process every transaction related to reporting and logging, and store these results until they are purged, either by a manual or scheduled job.

In high volume environments, install the InputAccel Database server on a fast multi-CPU computer with as much RAM as its operating system will support. Consider using a 64-bit operating system to provide access to additional memory. (32-bit Windows limits usable memory to 3 GB.)

Depending on your batch volume and on the logging and reporting rules you have enabled, InputAccel Database storage requirements can become very large. High throughput becomes critical to maintaining production volumes. Choose the latest high-speed technology from among available disk storage systems. Configure multiple identical disk drives in a RAID configuration to achieve the required reliability and failure protection. Use trusted and reliable disk drives with high performance and high capacity ratings. Connect the drives to disk controllers that provide hardware-level support for RAID 0+1, and have on-board disk caching of at least 32 MB, write-back caching (write to RAM), and battery backup for the on-board cache. Disk controllers that are integrated into motherboards typically do not provide the features, performance, or reliability that an enterprise platform demands.

Note:

- In a typical deployment, only a small amount of processing time is consumed interacting with the InputAccel Server and clients. Reports that issue complex queries put a much greater load on the database. An InputAccel installation has only one InputAccel Database instance; therefore, to increase database performance, you must increase the performance of the server that hosts the InputAccel Database. You cannot increase performance by adding more instances of the InputAccel Database.
- Multiple, separate InputAccel systems must each have their own InputAccel Database. If your SQL Server has the necessary performance, then multiple InputAccel Databases (each with a different name) can be installed on a single instance of SQL Server.
- The computer hosting the InputAccel Database should have the highest-speed network connection available to ensure maximum throughput.
- The amount of data written to the InputAccel Database is related to the amount of logging and reporting that has been configured. Enabling Audit Logging causes the InputAccel system to write a lot of data to the InputAccel Database. Enabling Reporting writes even more data.

Related Topics —

Chapter 3, Installation planning
Database server requirements, page 11
Installing the InputAccel Database, page 56
Database issues, page 136

InputAccel Server considerations

Each InputAccel Server in your enterprise stores multiple copies of every image it processes - one or more for every module step that creates an output image. (ScanPlus can create multiple images per page scanned when used with MultiStream scanners, and IndexPlus can be configured to output multiple images per input image.) Image data requires more time to read and write and more disk space to store than typical text data. Use high-speed dual or quad-core computers with 32- or 64-bit operating systems. More available memory enables the InputAccel Server to handle higher volumes more efficiently. For this reason, even though the InputAccel Server is a 32-bit application, we strongly recommend installing it under 64-bit Windows where it can access the full 32-bit memory space (4 GB). (Under 32-bit Windows, maximum memory is limited to 3 GB, no matter how much physical memory is available.)

Use the same considerations for selecting an InputAccel Server disk system and network connection as you would for the InputAccel Database, as described in Database server considerations, page 23.

Note: The InputAccel Server fully supports locating its main directory structure on an NTFS file system, and uses the built-in NTFS security system (access control lists) to implement its own security. Alternatively, the InputAccel Server main directory can be located on a non-NTFS file system, such as is used in many Network Attached Storage (NAS) and Storage Area Network (SAN) devices. However, when installed on a non-NTFS file system, ACL-based security is not supported.

Caution: The machine name of the InputAccel Server must not be longer than 15 characters; otherwise, client computers will be unable to connect.

Related Topics —

InputAccel Server requirements, page 12
Installing the InputAccel Server, page 58
Upgrading the InputAccel Server, page 120
ScaleServer issues, page 137

Administration Console host system considerations

The Administration Console is hosted by Microsoft Internet Information Services (IIS) and has a minimal performance impact. Unless the system that hosts the Administration Console is being shared with other InputAccel components, no special performance or throughput considerations are required for this computer.

Note: Be sure to specify a unique port in the Administration Console setup program. The Administration Console setup program checks for other ports already used by IIS; however, it does not

check other applications for port conflicts. If another application is using the port, the Administration Console will not be accessible.
The Administration Console and InputAccel Remoting must be installed on separate computers.

Related Topics —

InputAccel web components and ClickOnce host requirements, page 13
Installing the Administration Console, page 60
InputAccel web components and ClickOnce host requirements, page 13
Installing InputAccel Remoting, page 83

ClickOnce host system considerations

Several InputAccel client modules can be distributed by using Microsoft ClickOnce deployment technology. ClickOnce can be accomplished either by deploying applications from a file share or from an IIS web server. In either case, installations are relatively infrequent and have minimal performance impact. Unless the system that hosts ClickOnce is being shared with other InputAccel components that have special needs, no special performance or throughput considerations are required for this computer.

Before deploying modules using ClickOnce, we strongly recommend that you have ClickOnce publishing skills or at minimum an understanding of ClickOnce technology. Be sure to read the articles about ClickOnce technology available on the Microsoft MSDN website.

Note:

- You cannot specify command-line parameters (such as `-department`) when a module is deployed by ClickOnce from a file share, because the shortcut icon that is created does not reference an actual module that can accept command-line arguments. If operators must specify departments or other command-line arguments when starting modules, you must deploy the modules from an IIS web server.
- Due to the way ClickOnce-deployed modules are registered, they are unable to write complete module information to the Windows Event Log. Therefore, message descriptions in the Event Log will not exactly match messages displayed in the Administration Console.

Related Topics —

Chapter 3, Installation planning
Installing the Administration Console, page 60
InputAccel web components and ClickOnce host requirements, page 13
Installing InputAccel Remoting, page 83

InputAccel Remoting server considerations

If you want to use distributed client workstations that do not have direct access to your InputAccel network, you can set up an InputAccel Remoting server. This server enables remote client workstations to use the Internet to connect and authenticate with an InputAccel system.

Note:

- You can publish ClickOnce modules on any server configured according to Microsoft ClickOnce requirements. As an option, consider ClickOnce publishing under the InputAccel Remoting website. To do so, install an InputAccel Remoting website first, and then create a ClickOnce web directory under it.
- Be sure to specify a unique port in the InputAccel Remoting setup program. The InputAccel Remoting setup program checks for other ports already used by IIS; however, it does not check other applications for port conflicts. If another application is using the port, the InputAccel Remoting service will not be accessible.
- Be aware that logging into a remote module that is connecting through the InputAccel Remoting host will take considerably longer than modules that are logging in locally, because in addition to authenticating and authorizing the user, the module also downloads configuration information, client side scripts, and a list of batches.

Caution: We strongly advise you to disable application pool worker process recycling for the IIS server that is hosting InputAccel Remoting. By default, recycling is enabled and set to 29 hours. Remote users will be disconnected from the InputAccel system and potentially lose data if the IIS instance that hosts InputAccel Remoting recycles its worker processes.

Related Topics —

Chapter 3, Installation planning
Installing the Administration Console, page 60
InputAccel web components and ClickOnce host requirements, page 13
Installing InputAccel Remoting, page 83

Web Services subsystem considerations

If you are planning to use the InputAccel Web Services subsystem, consider setting up one or more dedicated Web Services Hosting servers. Depending on your needs, a single server may be adequate; however, many enterprises have a need to handle both internal and external web service requests and responses, and so you may want to have one instance of Web Services Hosting openly accessible from the local network and another instance accessible from the Internet through a firewall.

A single instance of Web Services Coordinator handles requests from all instances of Web Services Hosting. The Web Services Coordinator communicates directly with the InputAccel Database, and should therefore be installed on a secure server with a high-speed network connection to the InputAccel Database host computer. Depending on the required performance of the Web Services subsystem, the Web Services Coordinator may share the same computer as the internal-facing Web Services Hosting instance or may require a separate, dedicated computer.

Note: Although you may install multiple instances of Web Services Hosting, this component does very little processing. Typically the only reason to install multiple instances is to separate internal from external request/response traffic. In any case, an InputAccel system may have only one Web Services Coordinator instance.

Before attempting to use the Web Services Input or Web Services Output module, be sure that the Web Services Hosting and Web Services Coordinator services are started.

Related Topics —

Chapter 3, Installation planning
InputAccel Remoting server considerations, page 25
Installing InputAccel Remoting, page 83

Client computer considerations

InputAccel has operator-attended client modules and unattended client modules. The InputAccel client setup program supports installation of any combination of InputAccel modules on a single workstation. Use the information in Chapter 2, System requirements and recommendations, to configure your client computers.

Typically, operator-attended modules should be installed on an as-needed basis. For example, if scanning operators only scan pages and never do indexing, then only install the ScanPlus module on their workstations. In cases where one operator performs multiple functions, install all needed modules on that workstation.

Unattended modules are configured and run continuously in a "wait for task" mode, processing tasks whenever they are received from the InputAccel Servers. Unattended modules are server-grade applications that should be installed on IT-managed servers and, if supported, run as Windows services. (Refer to Table 10, page 142 for a list of modules that run in unattended mode and that run as services.) For unattended modules that are run as services, no operator intervention is required. When running modules as services, you can choose to run them under a user account or a machine account.

To achieve optimum throughput without wasting available processing power, consider that some modules require relatively little processing power while others require a lot of processing power.

Export modules typically use minimal amounts of processing power and only process tasks intermittently. Multiple modules of this type may be hosted by a single processor without creating a bottleneck. On the other hand, page recognition and image enhancement modules can use all available processing power over extended periods and still may not keep up with the number of tasks being generated for them. Modules of this type typically should have dedicated processors and, in some cases, multiple instances of a module may be needed, each running on a separate processor. For example, to perform full-page optical character recognition on every page you capture, you must install enough instances of the selected OCR module to keep up with this workload.

To determine the actual number of instances required for your particular needs, you must observe the system in typical production operation, find the bottlenecks, and add module instances until the throughput is satisfactory. This process is known as client balancing and is accomplished by bringing one module instance on line at a time until the average number of new tasks being generated for the module is less than the number of tasks being processed by all module instances.

Note: When performing client balancing, it may not be necessary to install multiple module instances on separate physical computers. For example, if you are using high-performance, multiprocessor computer systems, you may be able to install multiple instances of a page recognition or image processing module on one computer. Or you may be able to install a combination of processor-intensive modules and non-processor-intensive modules on one computer. Table 10, page 142 provides a list of modules that can run as services as well as modules for which multiple instances can be configured to run as services on a single computer. Manually registering a client module to run as a service, page 93 explains how to configure modules that have already been installed to run as services.

Related Topics —

Best practices for running modules as services, page 28
Chapter 3, Installation planning
Appendix A, InputAccel client modules
Common requirements for all client modules, page 15
Installing the InputAccel Client Components, page 62
Upgrading client modules, page 123

Best practices for running modules as services

When configuring modules to run as services, you can choose to run a module under a user account or under the built-in Network Service account. After configuring the module's "run-as" account, you must assign module permissions to the account by using the Administration Console.

Running modules as services under a user account

If you choose to run the module under a user account, you must supply the user name, password, and domain of this user. If you choose to install modules as services from the client setup program, you can specify credentials at that time.

Note: All modules that are installed at one time are configured to use the same credentials.

- Use the Administration Console to assign permissions to the user account or to the group to which the user account belongs.

Running modules as services under the built-in Network Service account

If you choose to run the module under the Network Service machine account:

- During client module installation: Select **Use the built-in Network Service account** in the **InputAccel Services Accounts** pane of the client setup program.
- After client module installation: Specify the Network Service account in the **Login** tab of the Windows Service Control Manager **Properties** window.
- Use the Administration Console to assign permissions to the machine account. The way you do this depends on whether you are running InputAccel in a normal production configuration or on a single computer as a development or demonstration system.
  - If you are running InputAccel in a normal production configuration, assign permissions in the Administration Console to the computer name that is running the module(s) as a Network Service. To simplify permissions management, consider creating a group containing the names of all of the computers running modules as services, and then select that group to assign permissions.
  - If you are running InputAccel in a development or demonstration configuration, where all components are installed on a single computer, assign permissions in the Administration Console to the Network Service account. To do this, select the **Include built-in security principals** checkbox in the **Select User or Group** window

For modules that support multiple service instances (as listed in Table 10, page 142), consider installing multiple instances on a single, multi-core computer to achieve client balancing as needed. For modules that do not support multiple service instances, consider running multiple instances in separate virtual machines on the same physical, multi-core computer.

Scalability

The modularity that is built into InputAccel enables customers to configure and reconfigure their InputAccel system to meet their changing needs. Both server and client subsystems of InputAccel are modular and scalable.

Topics in this section include:

InputAccel Server scalability

When your document capture workload exceeds the capabilities of a single InputAccel Server, you can scale up your system by adding more InputAccel Servers and creating a ScaleServer group. A ScaleServer group combines multiple InputAccel Servers into a single information capture system. Both attended and unattended modules can connect to the servers in a ScaleServer group, after which they can receive and process tasks from all connected servers. In addition to expanding the workload capacity over a single InputAccel Server, ScaleServer groups can also help to ensure that your client modules and their operators spend less idle time waiting for new tasks to arrive. You can adjust the number of client modules and InputAccel Servers to achieve the required balance of throughput. The ideal scenario is to have enough server capacity to process as many incoming batches as necessary while having enough client capacity to keep up with, but not exceed, the task processing requirements of the workload.

Most modules are ScaleServer compatible and therefore can connect to all InputAccel Servers in the group simultaneously. Modules that are not ScaleServer compatible can connect to any one InputAccel Server in the ScaleServer group at a time. (Modules cannot connect to multiple arbitrary InputAccel Servers— they can only connect to multiple servers that have been configured together as a ScaleServer group.) For a list of ScaleServer compatible modules, refer to Table 10, page 142.

Additional InputAccel Servers can be added to a ScaleServer group when your InputAccel system is initially configured or at any later time. For more information on managing and licensing ScaleServer groups, refer to the Using Administration Console section in the Administration Guide. For instructions on installing a ScaleServer group, refer to Configuring multiple InputAccel Servers as a ScaleServer group, page 68.

Note: A ScaleServer group is not a redundant or failover system. ScaleServer technology provides data and process sharing as well as load balancing capabilities; it does not provide data redundancy.

The InputAccel Server is also scalable by virtue of its side-by-side installation capability. If you are using high-end server hardware with multiple cores/multiple CPUs, you can take advantage of the additional processing power by installing multiple side-by-side instances of the InputAccel Server. This configuration enables better parallel execution of batches when running on multi-processor

computers. The actual performance benefit depends on your task load and the types of tasks you are processing.

Side-by-side installation also enables multiple instances of the InputAccel Server to be installed in an Active/Active MSCS Cluster, as explained in High availability and failover, page 38.

Related Topics —

InputAccel Server requirements, page 12
Installing the InputAccel Server, page 58
Upgrading the InputAccel Server, page 120
ScaleServer issues, page 137

Client scalability

InputAccel client modules process tasks sent to them from the InputAccel Server(s). A task is a unit of work whose size is determined by the design of the process being used, and may be a single page, multiple pages, an entire document, or an entire batch (perhaps thousands of pages). The design of InputAccel enables multiple modules to simultaneously process different tasks from all in-process batches. This means that production bottlenecks caused by slow modules can be resolved by adding more computers running those modules. There are several factors to consider when planning the number of each module required:

- The volume of incoming paper that must be processed. For example, a high-speed scanner with a skilled operator may be able to scan 20,000 pages per shift, but you may need to process 200,000 pages per 24-hour period. InputAccel enables you to install as many ScanPlus (and RescanPlus) workstations as required to handle your workload.
- The amount of processing power the module needs. For example, an OCR module requires much more time to process a task (recognize a page of text) than an export module requires to export the same page of text. InputAccel enables you to add as many OCR modules as necessary to keep up with the system workload.
- The amount of time an operator requires to process a task. For example, manual indexing involving many fields that must be manually keyed by an operator takes more time than simple indexing tasks. Also, operator skill and other external factors affect the time required to process each task. InputAccel enables you to add as many IndexPlus workstations as needed to keep up with the indexing workload.

Additional client computers can be added to your InputAccel system at any time after the initial installation without negatively impacting production. If you are using computers with multiple processors, multiple instances of certain modules can be installed as services on a single computer. Refer to Table 10, page 142 for a list of modules that support multiple service instances. Refer to Manually registering a client module to run as a service, page 93 for instructions on installing modules as services using the *serviceName* command-line argument.

Related Topics —

Chapter 3, Installation planning
Appendix A, InputAccel client modules
Common requirements for all client modules, page 15
Installing the InputAccel Client Components, page 62
Upgrading client modules, page 123

Security

Various security providers interact with InputAccel at various levels. Your planning must include considerations for security and how it affects and secures an InputAccel system.

The following table explains major security considerations.

Element	Security considerations
SQL Server	InputAccel supports SQL Authentication only; therefore, **SQL Server and Windows Authentication mode** must be enabled in the SQL Server and a valid SQL Server login ID is required to connect to the SQL Server that hosts the InputAccel Database. A login ID having SQL Server `sysadmin` role must be specified to create the InputAccel Database during the database phase of InputAccel installation.
InputAccel Database	Both the InputAccel Database and the msdb system database must have the `db_owner` database role membership. InputAccel does not use user-based authentication or authorization for database access; therefore, there is no need to create database users and groups. You can choose any of the following options for database access: • Use the “sa” (system administrator) account. This is generally not recommended, because it gives unrestricted access to the entire SQL Server and all of the data it contains. • Use the same account that was used to install the product and create the InputAccel Database. • Create an IAAdmin account with all permissions assigned to all objects in the InputAccel database, and use this account to access the database.
Authentication	InputAccel uses Microsoft Windows user accounts for authentication and authorization. Except when installed on a single computer for development or demonstration purposes, these user accounts must be domain accounts and may use any of the authentication security providers used by Windows: NTLM, Kerberos, or Negotiate. In a multiple-domain environment, you must create trusts between the different domains so that cross-domain authentication can succeed. The minimum trust relationship required is “Nontransitive One-Way External Trust” from the domain with clients that need to authenticate to the domain that has servers which must perform the authentication.

Element	Security considerations
User accounts	Consider using matching Windows user groups and InputAccel permissions roles for your users to simplify permissions control. By default, the IIS Machine Administrators user is assigned all InputAccel permissions. A member of the IIS Machine Administrators group must create a new role for the InputAccel administrator, and usually will grant all permissions to that role, and then add at least one member to it — the user designated as the InputAccel administrator.  **Caution:** Remove the IIS Machine Administrators account as soon as you set up the required accounts for accessing InputAccel. Leaving this account active enables anyone with local access to the computer to log in as an InputAccel Administrator. Consider creating an "InputAccel Supervisors" role with members having specific Administration Console permissions and full permissions to run client modules, and an "InputAccel Operators" role with members having no Administration Console permissions but full permissions to run client modules. Depending on your security requirements, you could break down these roles into additional roles with finer divisions of permissions and/or members. InputAccel requires that user accounts have passwords. Blank passwords are not supported in any scenario, even on a single-computer installation. Passwords must not contain "@" symbols because this symbol is used as a delimiter in InputAccel command line arguments. Servers and client modules running as services can be configured to run under a specific user account or a built-in machine account. As with most software applications, the user installing InputAccel components must be a member of the computer's local **Administrators** group. In addition to user credentials and Windows permissions, all InputAccel modules require that users be assigned to roles to which necessary permissions have been granted. These InputAccel security roles are managed through the Administration Console. For more information, refer to the Using Administration Console section of the Administration Guide.
Client privileges	Client software may run under individual domain user accounts or the machine account `Network Service`. Access can be controlled by setting the permissions for these accounts, and can be further controlled by using InputAccel user roles and further refined by employing InputAccel ACLs. User roles and ACLs are managed in the Administration Console. In addition, InputAccel licensing globally restricts which components can be run and how many components can connect to an InputAccel Server at one time.

Element	Security considerations
Firewalls	The InputAccel Database, InputAccel Servers, InputAccel client modules, Web Services subsystem, Administration Console host, and InputAccel Remoting host must all communicate with one another freely over specific ports. Corporate firewalls must be configured to forward network traffic on the specific ports which these components require. Personal firewalls must also support communication in and out of the computer they are protecting and must be configured to pass network traffic on the required ports. The customer is responsible for configuring firewall software in a compatible manner, as follows: • Ensuring that all InputAccel components (InputAccel Servers, Administration Console, all directly-connected client modules, and the InputAccel Remoting server, if used) can communicate with the InputAccel Database. Firewalls in the path of the SQL Server that hosts the InputAccel Database must be configured to pass network traffic on the required TCP port. (The SQL Server default port is 1433; the SQL Server Express default port is 1096. These can be changed during SQL Server configuration.) **Note:** Clients connecting through HTTP using InputAccel Remoting are an exception — they do not typically need firewall configuration. • Web Services Coordinator receives calls from Web Services Hosting through .NET Remoting on TCP port 40571. The Web Services Input modules receive calls from Web Services Coordinator through .NET Remoting on TCP port 12007 by default. The Administration Console also communicates with Web Services Coordinator using TCP port 12007. Any firewall in the communication path among these components must be configured to pass network traffic on these ports. • Ensuring that the InputAccel client modules are able to communicate with the InputAccel Servers and the InputAccel Remoting server, if used. This requires that any firewall between the client modules and the InputAccel Servers be configured to pass network traffic on the required port (port 10099, by default). The InputAccel Server setup program offers to automatically configure Windows Firewall as needed; however, the customer is responsible for configuring any other third-party firewall. **Note:** When installing an InputAccel Server, you can change the port on which it listens for network traffic. The default port is 10099. To specify a different port, you must use the command-line installation property **`IAS-INSTANCE`*`n`*`_PORT_NUMBER`** described in InputAccel Server installer properties, page 156. You must configure each client workstation to communicate on the same port as your InputAccel Server. You can do this interactively or by using the **`IASERVERPORT`** installation property during client installation. • Ensuring that HTTP traffic for the specified Administration Console port (port 80, by default) is not blocked by firewall configuration.

Element	Security considerations
Web components	The following components are hosted by IIS, which should be configured to use Secure Sockets Layer (SSL) to ensure user credentials and data traffic are encrypted between the hosts and their clients: • Administration Console • ClickOnce deployment • InputAccel Remoting • ECM Web Services Importer Access to these components is controlled by several security providers, including the web server that is hosting the component, Windows user permissions (ACLs), InputAccel licensing, and Administration Console-assigned user roles.
Remote access	Remote access to InputAccel is facilitated by the InputAccel Remoting component, which establishes a proxy server hosted by IIS. This component should be installed only if your operators need to connect to the InputAccel Server from remote locations over the Internet.

Other security considerations include:

- Running InputAccel in a hardened environment, page 34
- Running InputAccel with minimum Windows permissions, page 34

Running InputAccel in a hardened environment

Microsoft publishes documentation about running its server products in a secure, or hardened, environment. Hardening computers means establishing security policies, applying all of the latest operating system security patches, disabling unneeded services, enabling firewalls, blocking unused ports, and all the other details of configuring an IT infrastructure to block unwanted access.

InputAccel is intended to run in a hardened environment and has been tested with some common but not all possible hardened configurations and components.

Related Topics —

Chapter 3, Installation planning
Chapter 1, InputAccel overview

Running InputAccel with minimum Windows permissions

Good security practice includes setting up computers to run their applications with the minimum possible permissions. The following are the minimum Windows permissions required for InputAccel components:

- InputAccel Servers:
  - User: Must be a part of the Administrators group on the local machine.
  - Directories: Must have Read/Write access to the IAS data directory (`c:\IAS` by default) and to `c:\Documents and Settings\All Users\Application Data\EMC\InputAccel`. Must have Read access to the IAS installation directory (`c:\Program Files\InputAccel\Server\Server`, by default).
- Administration Console:
  - User: The "run as" account for the Administration Console must be a member of the Administrators group on each of the InputAccel Server machines, as well as a member of the IIS_WPG group on the computer hosting the Administration Console.
  - Directories: Must have Read/Write access to `c:\Windows\Microsoft.NET\Framework\v2.0.50727\Temporary ASP.NET Files` and to the `AdministrationConsole` directory and its subdirectories (located in `C:\Inetpub\wwwroot\AdministrationConsole`, by default).
- All modules:
  - User: Client computers must be a member of the local Users group.
  - Directories:
    - Non-Vista operating system: Must have Read/Write access to `c:\Documents and Settings\All Users\Application Data\EMC\InputAccel\settings.ini`
    - Vista operating system: Must have Read/Write access to `c:\ProgramData\EMC\InputAccel\settings.ini`
    - All operating systems: Modules not listed as "New in InputAccel 6.0" in Table 10, page 142 must have Read/Write access to `c:\Windows\win.ini`.
  - Registry: Must have Read/Write access to the Registry to enable the logging library to report performance counter information. Without this access, modules will run but will not report performance data.
- All modules listed as "New in InputAccel 6.0" in Table 10, page 142:
  - User: Client machines must be member of the local Users group. "Run as" users that have access to the network.

    To use command-line arguments to install, remove, or change service settings, the user must be a member of the Administrators group. The account that is assigned to the service through the command line is automatically granted the "Service Logon" right.
  - Directories: Must have Read access to the .NET config directory and to other common Windows directories such as `c:\Windows\System32`.
- All ClickOnce modules:
  - User: Client machines must be part of the local Users group. To install ClickOnce prerequisites, the user must be a member of the Administrators group.
- ScanPlus and Image Divider modules:
  - Directories: Must have Read/Write access to the system `Temp` directory.

- Multi-Directory Watch:
  - User: Must run as a named user (not a machine or built-in user). This user must have administrative rights.
  - Directories: Must have Read access to watched directories. Must have Write access to watched directories if the files they contain are to be moved or deleted after they are imported.
- Email Import:
  - Directories: Must have Read/Write access to the directory to which emails will be copied.
- Documentum Advanced Export:
  - Directories: Must have Read/Write access to the Documentum user directory (`c:\Documentum`, by default) and to the system `Temp` directory.
- Web Services Hosting:
  - User: Named user account. Running under an account with administrative rights simplifies configuration.
  - Ports: If run under a non-Administrator account, the Administrator should reserve the ports used by the Hosting service for the named user to establish HTTP connections on those ports. Use the `PortReserve.exe` command-line utility located in the `Client\binnt` directory of the InputAccel installation directory to reserve these ports.
- ClickOnce Deployment Utility (CODU):
  - User: To write deployment packages to a web host, the user must be a member of the Administrators group on the target web server machine.
  - Directories: Must have write permissions for the directory where the deployment packages will be written.

Related Topics —

Chapter 1, InputAccel overview
Chapter 3, Installation planning

Installing InputAccel across multiple domains

The InputAccel setup program is optimized for deploying the servers and clients within a single domain. In this environment, the setup program performs most or all of the required configuration automatically. However, InputAccel also works in a multi-domain environments.

In a multi-domain environment, you must configure your network to create trusts between the affected domains. Every time InputAccel performs a cross-machine communication, a security check is made. These security checks must succeed in order for the system to function properly.

The minimum cross-domain trust relationship required is “Nontransitive One-Way External Trust” from the domain with clients that want to authenticate to the domain that has servers who need to perform the authentication. Creating these trusts is an IT responsibility that uses operating system tools, and is beyond the scope of this guide.

The relevant access rights for these trusts are as follows:

- Any user who logs into an InputAccel Server must have the “Windows Login” privilege on the computer hosting the InputAccel Server.
- Any user who logs into the Administration Console must have the “Windows Login” privilege on the computer that hosts the Administration Console web server.

To assign users or groups from other domains to InputAccel security roles, either the account under which the Administration Console runs must have the privileges necessary to browse the other domains, or the users from the other domain must be added to Windows groups in the domain where the InputAccel system is running.

Related Topics —

Chapter 3, Installation planning
Chapter 1, InputAccel overview
Running InputAccel with minimum Windows permissions, page 34
Installing InputAccel in a workgroup, page 37

Installing InputAccel in a workgroup

Installing InputAccel in a workgroup is supported only in a development or demonstration system; that is, when all components are installed on a single computer. A computer in a Microsoft Windows workgroup must maintain its own list of users and groups, because it does not use the central security database of a domain. A “local user” is a user that has a security account on the local computer. Even though it is running on a single computer, InputAccel still requires users to log in with a valid Microsoft Windows user name and password. Blank passwords are not allowed. Refer to Installing InputAccel on a single computer, page 55 for detailed instructions.

Note: When logging into InputAccel from a client module or from the Administration Console, you must specify a domain. If you have installed InputAccel on a single computer without a domain controller, specify “.” or “localhost” in the Domain field of the **Login** window.

Related Topics —

Chapter 3, Installation planning
Chapter 1, InputAccel overview
Running InputAccel with minimum Windows permissions, page 34
Installing InputAccel across multiple domains, page 36

High availability and failover

InputAccel uses several technologies to ensure high availability and failover protection.

Technology	Description
ScaleServer groups	If an InputAccel Server becomes unavailable due to a planned or unplanned interruption, other InputAccel Servers in the same ScaleServer group automatically continue sending tasks to and accepting tasks from client modules. ScaleServer groups provide high availability during hardware and software failures; however, they do not provide failover, because the tasks on the interrupted server are not rerouted and cannot be processed until the server again becomes available. Refer to Configuring multiple InputAccel Servers as a ScaleServer group, page 68 for instructions on installing and configuring ScaleServer groups.
Modular clients	Client modules can be brought online to supplement or replace existing client modules without disrupting production. Refer to Installing the InputAccel Client Components, page 62 for client installation instructions.
Clustering	The InputAccel Server supports both Active/Passive and Active/Active clustering for failover protection. Individual InputAccel Servers or entire ScaleServer groups can be clustered to provide both high availability and failover. In addition, we strongly advise using clustering to provide high availability/failover protection for the database server platform. If the InputAccel Database becomes unavailable, the entire InputAccel system stops. Consider using clustering for your InputAccel web servers and other key Windows services. Refer to Installing the InputAccel Server in a clustered environment, page 69 for instructions on setting up InputAccel in an MSCS cluster. Other InputAccel components are compatible with clustering because their host software can be clustered. For example, Internet Information Services (IIS) can be clustered, providing high availability and failover for the InputAccel web components (Administration Console host, InputAccel Remoting host, and ClickOnce deployment host). **Note:** IIS clustering for InputAccel requires the use of “sticky sessions” (session affinity set to **`Single`**) to ensure that each login has a persistent connection to the same IIS instance.
Input Management Console	Provides continuous monitoring of business service level information and identifies application problems, process exceptions and Service Level Agreement (SLA) violations. Refer to Installing EMC Captiva Input Management Console, page 96 for information on installing the Input Management Console.

Technology	Description
General considerations	Part of high availability includes choosing components and best practices designed to deal with faults. Examples include: • High-performance RAID arrays for data storage redundancy and hot-swap capabilities. • Datacenter style rack mount or blade server hardware for key system components with redundant power supplies and other enterprise-level features. • Battery backup/power protection systems to keep your systems running or to perform an orderly shutdown in the event of a power outage. • Remote monitoring and tuning software, such as the Input Management Console. • VMware VMotion in lieu of clustering, enabling you to move virtual machines from one host to another in the event of a system failure. • Offsite storage for short term, rotating backup of paper that has been scanned in addition to media containing backups of irreplaceable files.

High availability best practices

In addition to the high availability and failover mechanisms designed into InputAccel, we recommend the following best practices for other critical system components when InputAccel is used in mission-critical applications:

- Configure your SQL Server for high availability by setting up database mirroring and/or clustering. Refer to Microsoft recommendations for advice and instructions.
- Configure your InputAccel Servers for high availability by using ScaleServer groups and configuring them in an Active/Passive or Active/Active MSCS cluster. Refer to Configuring multiple InputAccel Servers as a ScaleServer group, page 68 and Installing the InputAccel Server in a clustered environment, page 69 for instructions.
- Run unattended client modules as services and configure those services for high availability by enabling automatic restart on failure. Refer to Manually registering a client module to run as a service, page 93 for the necessary settings.
- Configure the Administration Console web server for high availability. Refer to Microsoft IIS high availability best practices for recommendations and instructions.

Related Topics —

Implementing a disaster continuation system, page 41
Managing a disaster continuation system, page 42

Disaster planning

Disaster planning is important for any business-critical application. The extent to which you plan for disaster and disaster recovery depends on your needs, your budget, and the importance of your document capture system to the continuation of your business. At one end of the spectrum is planning for routine backups of critical data, perhaps with offsite storage. At the other end of the spectrum, you might consider having multiple Microsoft Cluster Service (MSCS) clusters in both local and remote locations, each with its own Storage Area Network (SAN), with automatic, real-time SAN replication. Some common themes of disaster planning and recovery include:

- Determining what to do in case your current production facility cannot function in any way.
- Planning for continuing production at another facility, possibly using equipment that is not in your possession today.
- Devising a way to redirect new work to the substitute production site.
- Arranging to re-process a certain quantity of work that may be lost in the event of a disaster.
- Planning for training of additional or replacement personnel to help carry out your plan.
- Periodically testing your disaster recovery plan to ensure everything will function as needed in the event of a disaster.

EMC offers disaster recovery pricing that provides licensing and activation for periodic testing and one-time use of a disaster continuation system.

Topics in this section include:

Creating an InputAccel disaster continuation plan

Disaster recovery planning should include a written plan describing exactly how to restore InputAccel production after a disastrous event. When writing your plan, consider the following questions:

- Who are the key personnel responsible for rebuilding the InputAccel system and restoring production?
- Who will act in your place?
- Where will the documentation be kept?
- Who will provide backup for key team members that may be unavailable?
- How will you train replacement or temporary workers?
- How long will it take you to restore full production throughput?
- What will happen if you need to relocate your department to another location?

Related Topics —

Disaster recovery considerations, page 41
Implementing a disaster continuation system, page 41
Managing a disaster continuation system, page 42
Installing the InputAccel Server in a clustered environment, page 69

Disaster recovery considerations

Disaster recovery can encompass much more than simple backups and redundancy. If you are planning to put in place a simple backup plan, you should consider making both local and off-site backups of the following critical components:

- Directory trees from each of your InputAccel Server `IAS` directories
- InputAccel Database from SQL Server
- Scanner drivers
- License files
- Patches
- Custom server and client software (from your own developers or EMC Consulting)
- Custom client desktop shortcuts
- Client side script source code
- Client `win.ini` and `settings.ini` files

Table 8, page 101 provides a detailed list of files that should be backed up together with their default locations on server and client computers.

Related Topics —

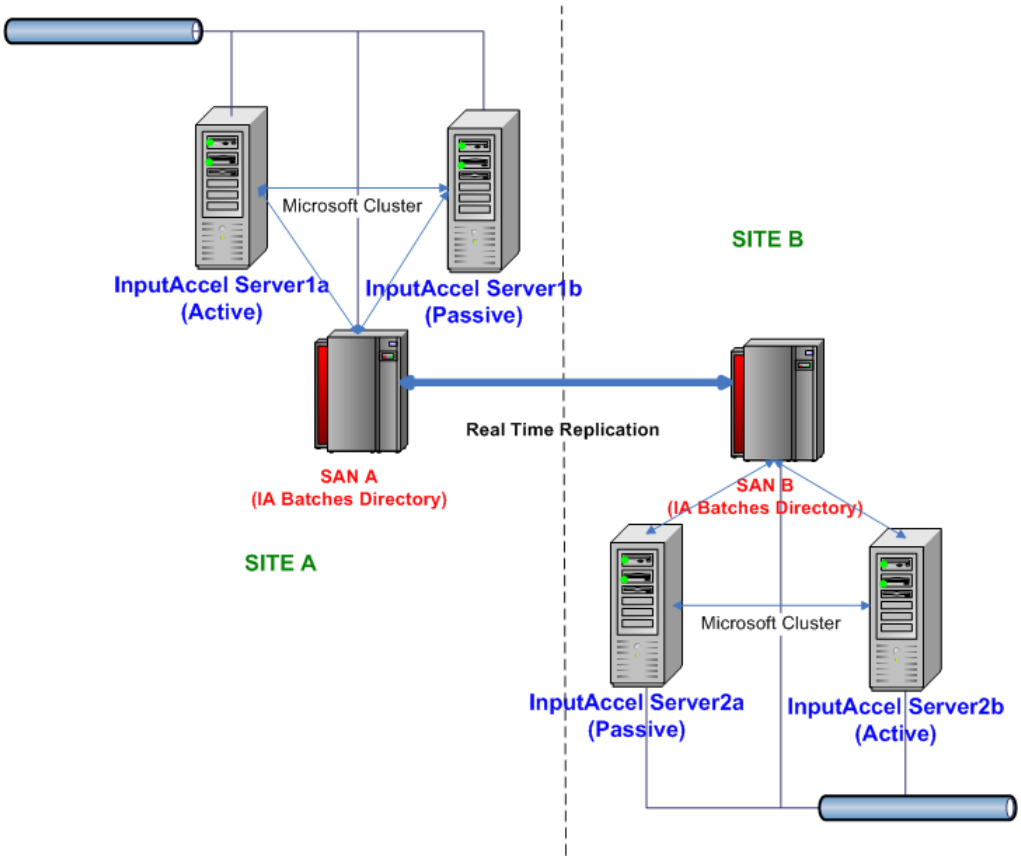
Disaster planning, page 40
Implementing a disaster continuation system, page 41
Managing a disaster continuation system, page 42
Installing the InputAccel Server in a clustered environment, page 69

Implementing a disaster continuation system

Rather than planning to manually archive and store your InputAccel data for disaster recovery, consider an automated disaster continuation system.

- Install InputAccel Servers and SQL Server in an active/active MSCS cluster, where one cluster server is remotely located.
- Use real-time replication to keep the storage system of the remote cluster server constantly synchronized with the storage system of the local system.
- Install InputAccel client software to handle the necessary disaster continuation production volume (or to handle a portion of your normal daily production, if needed).

With a replicated system, the only backup and archival tasks you need to think about are those related to custom source code for script files. When patches or custom software are used, be sure to deploy them to all locations, so that each site has identical functionality.



With a disaster continuation system, the remote site (Passive InputAccel Server 2a) is always ready to take over production from the local site. When daily production is performed at both sites, the local site (Passive InputAccel Server 1b) is always ready to take over production from the remote site.

Related Topics —

Disaster planning, page 40
Disaster recovery considerations, page 41
Managing a disaster continuation system, page 42
Installing the InputAccel Server in a clustered environment, page 69

Managing a disaster continuation system

If you deploy a replicated disaster continuation system using MSCS clusters, you now have an additional consideration: how to manage the system. For example, you need to know when a problem causes a passive node to take over for a failed active node and you may want to automatically redirect how documents are routed. You may want ScanPlus, Multi-Directory Watch, Email Import, or Web Services Input to automatically route new batches to the currently-active node of your cluster, so that no manual reconfiguration is necessary.

The Input Management Console can perform this function when it is also installed in an MSCS cluster, ensuring that Service Level Agreements (SLAs) are enforced and that there is no single point of failure. In addition to performing automatic redirection, the Input Management Console can perform load

balancing of work among the set of clustered InputAccel Servers. For more information, refer to Installing the InputAccel Server in a clustered environment, page 69.

Related Topics —

Disaster planning, page 40
Disaster recovery considerations, page 41
Implementing a disaster continuation system, page 41
Installing the InputAccel Server in a clustered environment, page 69

Deployment

InputAccel can be deployed in a variety of ways to meet the needs of various types of customers:

- Standard local installation by running **`setup.exe`** from the local installation media or from a network share.

  Note: If you are running `setup.exe` from a network location, then you may see a Windows **Open File – Security Warning** window prompting you to run the program or cancel. To install InputAccel, click **Run**. To disable this message, edit the Internet Explorer security settings and lower the security level for the Local Intranet zone.
- Remote/automated installation using a "push" installation tool and command-line setup parameters. Refer to Unattended installations, page 88 for detailed command-line setup options.
- ClickOnce installation of selected modules: ScanPlus, RescanPlus, and IndexPlus. These are the main attended (user-interactive) modules within the InputAccel system. When selecting ClickOnce, consider whether to deploy your installation packages from a network file share or a web server. Make sure your users have the necessary permissions to access the deployment location. Then use the ClickOnce Deployment Utility, included in the InputAccel client installation, to create installer packages and deploy them for both local and remote use. ClickOnce enables you to deploy and update applications with an absolute minimum of user interaction. Refer to Deploying modules with the ClickOnce Deployment Utility, page 84 for instructions on setting up and deploying ClickOnce installation packages.

  Note: InputAccel installs performance counters that enable administrators to monitor module performance by using the Performance snap-in of the Microsoft Management Console. Be aware that performance counters do not work for modules that have been installed by ClickOnce deployment.

Related Topics —

Development/demonstration installation, page 47
Small production installation, page 48
Medium distributed production installation, page 49
High availability production installation, page 50
Distributed volume installation, page 52
Enterprise installation, page 53

Scanner drivers

The InputAccel 6.0 setup program includes all currently-available ISIS scanner drivers. When installing ScanPlus and RescanPlus by running `setup.exe`, you can install a single scanner driver. After you finish client setup, you can install additional scanner drivers by selecting **Add a Scanner Driver** from the main **Setup** window.

Scan and rescan operators can install the ISIS scanner driver (and any required additional software) included with their scanner, and can choose the scanner driver they want to use from among all scanner drivers installed on their workstation by selecting **Change selected scanner** in the **Settings** window of the ScanPlus or RescanPlus module.

Licensing and activation

InputAccel uses a server-based licensing system that enables EMC as well as third-party module developers to regulate how their software is used in an InputAccel installation. Licenses are installed on each of your InputAccel Servers. When a client module connects, the InputAccel Server checks for a valid license before letting the module operate.

License codes are uniquely keyed to the Server ID that the InputAccel Server retrieves from its security key. Each license code specifies a single module and regulates how many copies of the module can concurrently connect to the InputAccel Server, how many pages the module is allowed to process, how long the license is allowed to work, and what extra features are enabled.

The InputAccel Server can use either a hardware security key or an InputAccel activation file. Both types of security keys control the licensing of the InputAccel system. If you are using hardware security keys, be aware that both parallel port and USB versions are available.

If you are using activation files, be aware that each InputAccel Server requires a one-time Internet activation step. You perform the activation step in the **Server Activations** pane of the Administration Console, where you can link directly to the EMC Captiva Activation Portal. You can also access the Activation Portal by using your web browser to go to http://activation.captivasoftware.com

At the Activation Portal, you can do any of the following:

- Immediately obtain a new activation code for a new installation.
- Immediately obtain a new activation code after a hardware, software, or configuration change.
- Immediately obtain an Enter By extension.
- Initiate a Server ID migration when moving an InputAccel Server to a different computer.
- Request conversion from using a hardware security key to a software activation file.

Note: You must use activation file (software) security keys with side-by-side InputAccel Server installations. Side-by-side configurations are not compatible with hardware security keys. For more information on side-by-side installations, refer to Installing multiple instances of InputAccel Servers, page 66.

To install and manage license codes, and to activate InputAccel Servers using activation files, use the Administration Console. You will typically receive a file from EMC containing all of your license codes, which you can import to your InputAccel Server in a single step. You can also manually type license codes one at a time. For more information on licensing and activation, refer to the Using Administration Console section in the Administration Guide.

Topics on licensing and activation include:

ScaleServer licensing

InputAccel licensing for ScaleServer enables multiple InputAccel Servers to be configured so that all modules can connect to them. ScaleServer groups are defined and managed in the Administration Console. Each InputAccel Server that is to be a part of a ScaleServer group must have license codes that enable it to participate in the group and to enable the client modules to connect to the group.

The InputAccel Servers within a ScaleServer group share daily page count licenses to facilitate load balancing.

A ScaleServer license is included with certain levels of InputAccel licensing and is an available option in other license levels. Contact your account manager if you are unsure about the features included with your license.

Example —

- Server 1 and Server 2 are each licensed to process 50,000 pages/day, for a total ScaleServer capacity of 100,000 pages/day.
- 3 hours before the end of the day, Server 1 has reached its 50,000 page limit, but Server 2 has processed only 25,000 pages.
- Server 1 automatically transfers from the Server 2 license enough page capacity to continue working either until the end of the day or until 100,000 pages have been processed by the InputAccel system in that day.

This is a simple example, but the logic applies to more complex scenarios, where you may have 8 InputAccel Servers in a ScaleServer group, all having different remaining daily page counts.

For instructions on setting up ScaleServer groups and managing licenses, refer to the Using Administration Console section in the Administration Guide.

Related Topics —

Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46

Licensing for use in a Microsoft cluster

InputAccel licensing for clustering enables multiple InputAccel Servers to be configured in an MSCS Active/Passive or Active/Active cluster. A standard InputAccel Server license does not enable the server to run as part of a cluster.

For detailed information on configuring multiple InputAccel Server instances in an MSCS cluster, refer to Installing the InputAccel Server in a clustered environment, page 69. For instructions on installing and managing licenses, refer to the Using Administration Console section in the Administration Guide.

Related Topics —

Licensing for disaster recovery, page 46
ScaleServer licensing, page 45
Activating and licensing InputAccel, page 61
Activating the InputAccel Server in an Active/Passive cluster, page 74
Activating and licensing the InputAccel Server in an Active/Active cluster, page 80.

Licensing for disaster recovery

Certain levels of InputAccel licensing include licenses for implementing, testing, and using a disaster recovery system. If you are unsure about whether your licensing level includes a disaster recovery system, contact your account manager. For information on setting up a disaster recovery system, refer to Disaster planning, page 40. For instructions on installing and managing licenses, refer to the Using Administration Console section in the Administration Guide.

Related Topics —

ScaleServer licensing, page 45
Licensing for use in a Microsoft cluster, page 45

Compatibility

InputAccel version 6.0 is compatible with the following:

- VMware support: InputAccel can be run within the following VMware products:
  - VMware Workstation version 6.0.4 or 6.0.5 (when running a 32-bit operating system)
  - VMware Workstation version 6.0.5 (when running a 64-bit operating system)
  - VMware Server 1.0
  - VMware ESX Server 3.5
  - VMware VMotion (enabling VMotion is transparent to InputAccel components)
- Citrix support: InputAccel client components are compatible with the following Citrix products:
  - Citrix MetaFrame Presentation Server 4.0
  - Citrix MetaFrame Presentation Server (XenApp) 4.5

  Typically customers use Citrix to host IndexPlus for a large group of index operators.

- IPv6: InputAccel supports Internet Protocol version 6 (IPv6).
  - InputAccel Servers: IPv6 is supported on Windows Server 2003. (IPv6 protocol must be installed for Windows Server 2003.)
  - InputAccel client modules: IPv6 is natively supported under Windows Vista. IPv6 is supported on Windows Server 2003 and Windows XP with SP2. (IPv6 protocol must be installed for Windows Server 2003 and Windows XP.)

  Additional information for installing the IPv6 protocol for Windows Server 2003 and Windows XP can be found at Microsoft's TechNet website.

  Note: When installing the Administration Console in an IPv6 environment, do not specify a specific IP address. You must select **(All Unassigned)** in the **IP address to use for this web site** field in the **InputAccel Web Components** setup window.
- Section 508: InputAccel 6.0 adheres to Section 508 of the Disabilities Act. For additional information on compliance standards, you can request the InputAccel 6.0 Voluntary Product Accessibility Template (VPAT) through EMC Support Services.

Related Topics —

Chapter 2, System requirements and recommendations
Chapter 3, Installation planning
Chapter 5, Upgrading InputAccel

Sample configurations

You can install InputAccel by following different installation models. Topics in this section describe the following installation scenarios:

- Development/demonstration installation, page 47
- Small production installation, page 48
- Medium distributed production installation, page 49
- High availability production installation, page 50
- Distributed volume installation, page 52
- Enterprise installation, page 53

Development/demonstration installation

This configuration is typically used for customer demonstrations or development of processes and custom modules, and must not be used in a production environment. In this configuration, all components run on a single computer. This could require a large amount of RAM depending on the number of client modules that are running, the amount of work in the system, and the size of the InputAccel Database. As for all server products, it is best to avoid paging in the system and instead configuring the server components to restrict how much RAM they use to avoid over-committing system resources.

The single machine installation scenario is discussed in detail in Installing InputAccel on a single computer, page 55.

Related Topics —

Chapter 3, Installation planning
Chapter 2, System requirements and recommendations
Small production installation, page 48
Medium distributed production installation, page 49
High availability production installation, page 50
Distributed volume installation, page 52
Enterprise installation, page 53

Small production installation

This configuration (detailed in the following table) may be used when a single InputAccel Server can handle the required volume of pages. Reports are an important aspect of this installation and so the InputAccel Database is installed on a separate server. However since the web components run on the same computer as the InputAccel Server, the server computer should have multiple processors and sufficient RAM.

Server/Machine	Component to install	User Account	Runs as
Server 1	InputAccel Database hosted by Microsoft SQL Server	N/A	N/A
Server 2	InputAccel Server	Domain user in the local Administrators group	Service
	Administration Console web component and ClickOnce packages	Domain user in the local Administrators group	Service
	Web Services Hosting	Domain user	Service only
	Web Services Coordinator	Domain user	Service only
Computer 1	ScanPlus	Domain user	Application
Computer 2	IndexPlus	Domain user	Application
Computer 3	Unattended modules (except Web Services Input and Web Services Output modules)	Network Service	Service
	Web Services Input and Web Services Output modules	Domain user	Service only

Refer to the steps outlined in Installing InputAccel on a single computer, page 55 for details on installing these InputAccel components.

Related Topics —

Chapter 3, Installation planning
Chapter 2, System requirements and recommendations
Development/demonstration installation, page 47
Medium distributed production installation, page 49
High availability production installation, page 50
Distributed volume installation, page 52
Enterprise installation, page 53

Medium distributed production installation

This configuration (detailed in the following table) builds on the Small production installation, page 48. With the web server installed on a separate computer, the Administration Console can ensure more traffic, and the volume processed by the InputAccel Server can match the server hardware and licensing allocations.

Server/Machine	Component to install	User Account	Runs as
Server 1	InputAccel Database hosted by Microsoft SQL Server	N/A	N/A
Server 2	InputAccel Server	Domain user in the local Administrators group	Service
Server 3	Administration Console web component and ClickOnce packages	Domain user in the local Administrators group	Service
	Web Services Hosting	Domain user	Service only
	Web Services Coordinator	Domain user	Service only
Computer 1	ScanPlus	Domain user	Application
Computer 2	IndexPlus	Domain user	Application
Computer 3	Unattended modules (except Web Services Input and Web Services Output modules)	Network Service	Service
	Web Services Input and Web Services Output modules	Domain user	Service only

Refer to the steps outlined in Installing InputAccel on a single computer, page 55 for details on installing these InputAccel components.

Related Topics —

Chapter 3, Installation planning
Chapter 2, System requirements and recommendations
Deploying modules with the ClickOnce Deployment Utility, page 84
Medium distributed production installation, page 49
High availability production installation, page 50
Distributed volume installation, page 52
Enterprise installation, page 53

High availability production installation

This configuration (detailed in the following table) builds on the medium distributed departmental production installation. It adds high availability for the InputAccel Server. Multiple InputAccel Servers are configured as a ScaleServer group in an Active/Active cluster.

Note: Multiple virtual servers can be created on a cluster node. These configurations do not specify how the virtual servers must be configured. This configuration is just as valid without the clusters being created and so also represents the large departmental production installation.

Server/Machine	Component to install	User Account	Runs as
Server 1	InputAccel Database hosted by Microsoft SQL Server. SQL Server should be clustered for high availability and it should use RAID 0+1 for data redundancy.	N/A	N/A
Server 2a	Two InputAccel Servers installed in a side-by-side installation, clustered with Microsoft Active/Active clustering and configured as a ScaleServer group with Server 2b	Domain user in the local Administrators group	Service

Server/Machine	Component to install	User Account	Runs as
Server 2b	Two InputAccel Servers installed in a side-by-side installation, clustered with Microsoft Active/Active clustering and configured as a ScaleServer group with Server 2a	Domain user in the local Administrators group	Service
Server 3	Administration Console web component and ClickOnce packages	Domain user in the local Administrators group	Service
	Web Services Hosting	Domain user	Service
	Web Services Coordinator	Domain user	Service
Computer 1	ScanPlus	Domain user	Application
Computer 2	IndexPlus	Domain user	Application
Computer 3	Unattended modules (except Web Services Input and Web Services Output modules)	Network Service	Service
	Web Services Input and Web Services Output modules	Domain user	Service only

Refer to the steps outlined in Installing InputAccel on a single computer, page 55 for details on installing these InputAccel components. Installing InputAccel Servers on a single computer in a side-by-side installation model is covered in Installing multiple instances of InputAccel Servers, page 66. To install the InputAccel Server in a clustered environment, refer to InputAccel Server in a clustered environment.

Related Topics —

Chapter 3, Installation planning
Chapter 2, System requirements and recommendations
Installing multiple instances of InputAccel Servers, page 66
Configuring multiple InputAccel Servers as a ScaleServer group, page 68
Installing the InputAccel Server in a clustered environment, page 69
Installing InputAccel Remoting, page 83
Deploying modules with the ClickOnce Deployment Utility, page 84

Distributed volume installation

This configuration (detailed in the following table) may be used for high capture volumes. It builds on the Large Departmental Installation adding more server capacity and distributed client modules but does not include high availability. This configuration can be expanded to include more servers for higher volumes.

Server/Machine	Component to install	User Account	Runs as
Server 1	InputAccel Database hosted by Microsoft SQL Server	N/A	N/A
Server 2, 3, 4, and 5	Two instances of InputAccel Server installed side-by-side on each computer and then configured together as a ScaleServer group	Domain user in the local Administrators group	Service
Server 3	Administration Console web component and ClickOnce packages	Domain user in the local Administrators group	Service
	Web Services Hosting	Domain user	Service
	Web Services Coordinator	Domain user	Service
Computer 1	ScanPlus	Domain user	Application
Computer 2	IndexPlus	Domain user	Application
Computer 3	Unattended modules (except Web Services Input and Web Services Output modules)	Network Service	Service
	Web Services Input and Web Services Output modules	Domain user	Service only

Refer to the steps outlined in Installing InputAccel on a single computer, page 55 for details on installing these InputAccel components.

To install the InputAccel Server in a side-by-side installation, refer to Installing multiple instances of the InputAccel Server. Refer to Configuring multiple InputAccel Servers as a ScaleServer group, page 68 for steps to configure the InputAccel Servers as a ScaleServer group.

Related Topics —

Chapter 3, Installation planning
Chapter 2, System requirements and recommendations
Configuring multiple InputAccel Servers as a ScaleServer group, page 68
Installing InputAccel Remoting, page 83
Deploying modules with the ClickOnce Deployment Utility, page 84

Enterprise installation

This installation represents a typical enterprise installation where data comes from several sources and not just a scanner. This is a specialization of the Large Departmental Installation. This installation scenario provides various options for installing the InputAccel Server and the client modules to use.

The enterprise installation scenario is discussed in detail in Installing InputAccel in a production environment, page 63.

Related Topics —

Chapter 3, Installation planning
Chapter 2, System requirements and recommendations
Additional installation and configuration options, page 66

Chapter 4

Installing InputAccel

This section explains how to install InputAccel for the first time.

Topics on installing InputAccel include:

Installing InputAccel on a single computer

This section describes the installation for a development or demonstration system in which all software is installed on a single machine. This configuration is used for customer demonstrations and for developing and testing the InputAccel workflow.

This configuration could require a large amount of RAM depending on the number of client modules that are running, the amount of work in the system, and the working set of the database. Serv̀er components can be configured to restrict how much RAM is used to avoid over-committing system resources. For example, the InputAccel Server can both limit its RAM usage and the number of batches it has loaded at once. SQL Server can be configured to limit how much RAM it uses.

The following table summarizes the configuration for a single machine installation:

Table 6. Development or demonstration installation

Machine	Component to install	User Account
Computer 1	InputAccel Database hosted by Microsoft SQL Server	N/A
	InputAccel Server	Domain user in the local Administrators group
	Administration Console web server	Domain user in the local Administrators group
	Unattended InputAccel Client modules	Network Service or domain user
	Attended InputAccel Client modules	Domain user

To install InputAccel on a single machine:

1. Make sure your computer(s) meet the system requirements detailed in Chapter 2, System requirements and recommendations.
2. Install the InputAccel Database Components.
3. Create a SQL Server login for InputAccel.
4. Install the InputAccel Server Components.
5. Install the Administration Console from the InputAccel Web Components.
6. Activate the InputAccel Server and install the InputAccel licenses.
7. Install the InputAccel Client Components.

Installing the InputAccel Database

InputAccel uses a Microsoft SQL Server database to store information such as configuration settings and batch data. This installation creates the InputAccel Database.

Before you can install the InputAccel Database components, you must obtain and install your own copy of Microsoft SQL Server to host the database. Microsoft SQL Server must be configured with the following settings:

- You must have a user account that is part of the SQL Server `sysadmin` role.
- You must be a member of the local `Administrators` on the computer from which you are running the setup program.
- You must enable TCP/IP protocol in SQL Server. In most Enterprise editions, TCP/IP protocol is enabled by default; in other editions (for example, SQL Server 2005 Express Edition), it may be disabled by default. After changing this setting, you must restart the SQL Server service.
- You must enable **SQL Server and Windows Authentication** mode in Microsoft SQL Server Management Studio, and then restart the SQL Server service.
- You must install the SQL Server Agent service and have it running.

Refer to the Chapter 2, System requirements and recommendations for information about the supported versions of SQL Server.

Note: In development or testing environments only, you can use Microsoft SQL Server 2005 Express Edition.

When using Microsoft SQL Server 2005 Express Edition, note the following limitations:

- TCP/IP is disabled by default. You must enable TCP/IP protocol for SQL Server Express, and then restart the SQL Server Express service.
- Databases are limited to a maximum of 4 GB. When the database reaches this size, you must manually purge batches and other data before you can continue to use InputAccel.
- SQL Server Express does not support scheduled jobs for automated purges. You can use the Administration Console to perform real-time operations, but the scheduling features will not work.
- SQL Server Express creates a named instance by default. This can be changed during the SQL Server Express installation, if preferred. If it is not changed to an unnamed instance, you must specify the instance name in all database connection strings.

- SQL Server Management Studio Express is not automatically installed with all versions of SQL Server Express, but it is available as a separate installation from Microsoft.

To install the InputAccel Database:

1. Start the InputAccel setup program from the installation media. If the setup program does not start automatically after a few seconds, or if you are running the installation from a local disk or network share, open the file `autorun.exe` to begin.
2. From the **InputAccel Products** menu, select **Install Products**.
3. From the **Installation Choices** menu, select **Step 1 - Install the InputAccel Database**.
4. If you are prompted to install prerequisite applications, click **Install** and click **Next**.
5. Accept the license agreement and click **Continue**.
6. In the **Destination Folder** window, click **Next** to install to the default destination folder or click **Change** to select a new location.
7. In the **Configure InputAccel Database** window, specify the login credentials for the SQL Server, and then click **Next**. InputAccel only supports SQL Authentication, which means a SQL Server login ID is required to connect to a SQL Server. An account with the `sysadmin` role must be used when creating the InputAccel Database.

   Note:

   - The **Create the InputAccel Database** checkbox is selected, the local **Database Server**, SQL Server **Port**, and Database name are specified. (The default SQL Server port is 1433 and the default SQL Server Express port is 1096.)
   - If you are using a named instance for the SQL Server, be sure to specify the **Database Server** in the format, **`[machine_name]\[instance_name]`**. For SQL Server 2005 Express Edition, the default instance name is `SQLExpress`.
8. Click **Install** and then click **Finish**.
9. To verify that you have successfully installed the InputAccel Database, run SQL Server Management Studio, and expand the **Databases** folder in the **Object Explorer** pane. The InputAccel Database should appear in the list of databases.
10. Create a new login for SQL Server and assign this user to the `db_owner` role for the msdb and InputAccel Database that was created by the installer. For instructions, refer to Creating a SQL Server login ID for InputAccel, page 57.

Related Topics —

Database server requirements, page 11
Database server considerations, page 23
Chapter 3, Installation planning
Database issues, page 136

Creating a SQL Server login ID for InputAccel

Before installing the InputAccel Server and Web components, a SQL Server login ID with restricted access must be created. This login ID can be specified for the DAL registration during the InputAccel

Server and InputAccel Web Components installation. At no time should a system administration login ID be used in production environments for DAL registration. Using a login ID with full permissions is a security risk.

The new SQL Server login ID must be configured with the following:

- Set the login ID to use **SQL Server authentication**.
- Set the **Default database** to the InputAccel Database.
- Map the login ID must be mapped to the InputAccel Database with the `db_owner` database role membership enabled.
- Map the login ID to the msdb with the `db_owner` database role membership enabled.

Related Topics —

Database server requirements, page 11
Database server considerations, page 23
Chapter 3, Installation planning
Installing the InputAccel Database, page 56
Database issues, page 136

Installing the InputAccel Server

The InputAccel Server is an open integration platform that manages and controls the document capture process by routing document pages along with processing instructions to the appropriate client modules.

Caution: The machine name of the InputAccel Server must not be longer than 15 characters; otherwise, client computers will be unable to connect.

This procedure installs the InputAccel Server, sample process files, and documentation.

To install the InputAccel Server:

1. Start the InputAccel setup program from the installation media. If the setup program does not start automatically after a few seconds, or if you are running the installation from a local disk or network share, open the file `autorun.exe` to begin.
2. From the **InputAccel Products** menu, select **Install Products**.
3. From the **Installation Choices** menu, select **Step 2 - Install the InputAccel Server**.
4. If you are prompted to install prerequisite applications, click **Install**.
5. Remove the USB security key, if used, and then click **Continue** and then click **Next**.
6. Accept the license agreement and click **Continue**.
7. Select one of the following setup types, and then click **Next**:
   - **Typical**: Performs the default installation.
   - **Custom**: Enables you to select the features to install.

8. In the **InputAccel Service Accounts** window, select one of the following to specify a user account when logging in to the InputAccel Server:
   - **Use the built-in Local System account**: Uses the credentials for the local machine's Windows account.
   - **Specify a user account**: Uses the credentials entered in the **Username**, **Password**, and **Domain** fields.
9. Select **Automatically start the "InputAccel Server" service when the system starts** if you want the InputAccel Server to be started as a service automatically when the system starts, and then click **Next**.
10. In the **Data Access Layer Registration** window, specify the login credentials for connecting to the SQL Server. This is the SQL Server user account that provides `db_owner` permissions to the InputAccel Database and the msdb system database. Click **Next**.

    Note: By default, **Register the Data Access Layer with the InputAccel database** is selected and the local database server, default SQL Server port 1433, and Database name are specified. (The default SQL Server Express port is 1096.)
11. If the Windows Firewall is running and enabled, the **Configure Windows Firewall** window displays. By default, **Let setup configure the Windows Firewall** is selected. This option configures the Windows Firewall to pass network traffic on the necessary ports. Clear the checkbox if you want to configure the firewall manually.
12. Click **Next**.
13. If the computer on which you are installing the InputAccel Server belongs to a domain, the **Administration Console User** window is displayed. In the **Username** and **Domain** fields, enter the name and domain name of the account that will host the Administration Console, click **Next**, and then click **Install**.
14. By default, **Start the InputAccel Server service when setup completes** is selected. Clear the checkbox if you want to start the InputAccel Server service manually when setup completes.
15. Click **Next**.
16. Click **Finish**. If used, install your USB security key.
17. To verify that the InputAccel Server has been successfully installed, open the Microsoft**Services** window (click **Start** > **Programs** > **Administrative Tools** > **Services**) and start the InputAccel Server service.

Related Topics —

InputAccel Server requirements, page 12
InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
Upgrading the InputAccel Server, page 120

Installing the Administration Console

The **InputAccel Web Components** setup program installs the Administration Console. The Administration Console module is a web-based module that monitors and administers an InputAccel system.

This component can also install InputAccel Remoting features, which enable remote client modules to access the InputAccel Server and InputAccel Database, but the Administration Console and InputAccel Remoting cannot be installed on the same machine. For information on installing InputAccel Remoting, refer to Installing InputAccel Remoting, page 83.

To install the Administration Console:

1. Start the InputAccel setup program from the installation media. If the setup program does not start automatically after a few seconds, or if you are running the installation from a local disk or network share, open the file `autorun.exe` to begin.
2. From the **InputAccel Products** menu, select **Install Products**.
3. From the **Installation Choices** menu, select **Step 3 – Install the InputAccel Web Components**.
4. If you are prompted to install prerequisite applications, click **Install** and then click **Next**.
5. Accept the license agreement and click **Continue**.
6. Select **Administration Console** as the feature to install, and then click **Next**.

   Note: The Administration Console and InputAccel Remoting features cannot be installed on the same computer because they are incompatible.
7. Click **Next** to install to the default destination directories or click **Change** to select a new location.
8. In the **Data Access Layer Registration** window, specify the login credentials for connecting to the SQL Server, and then click **Next**.

   Note: By default, **Register the Data Access Layer with the InputAccel database** is selected and the local database server, default SQL Server **Port** 1433, and Database name are specified. (The default SQL Server Express port is 1096.)
9. In the **InputAccel Web Site User Account** window, provide the login credentials for the Windows user account that will run the InputAccel Web Components website. Use a user or machine account meets the requirements of your organization's security policy and then click **Next**.
10. In the **InputAccel Web Components** window:
    a. Provide the **InputAccel web site description**.
    b. From the **IP address to use for this web site** list, select the appropriate IP address.
    c. In the **TCP port this web site should use** field, enter the port number you want to assign to the website, and then click **Next**. Be sure to mark down the IP address and port assignment for the Administration Console you are installing. You will need this information to test your installation in subsequent steps.

       Note: By default, Administration Console and ECM Web Services Importer both use port 80. If you are installing ECM Web Services Importer on the same computer, make sure that Administration Console does not use port 80.

11. If the port you selected is already in use, the **TCP Port Conflict** window displays. Disable the website currently assigned to the port and click **Next**.
12. Click **Install** and then click **Finish**. The installer creates a **Start** menu shortcut to Administration Console on the computer where Administration Console is installed.
13. Verify the installation:
    a. Start Internet Explorer and browse to the URL of the Administration Console server. Typically, this is similar to "`http://<hostname>:<port_number>`" (The hostname and port number are established when the Administration Console web components is installed.)

       Note: To use an IP address rather than a hostname in the Administration Console URL, you must add the IP address to the list of valid sites in your **Local Intranet** zone.

    b. Type the credentials of the user logging into the Administration Console.

       Note: You can specify a **localhost** or a period (.) in the **Domain** field to indicate a user from the local computer.

    c. Click **Logon**. The Administration Console window displays in a browser.

Note:

- If the Administration Console user account credentials were not provided during InputAccel Server installation, then the user account under which the Administration Console service is running must be added to the `Administrators` group on the InputAccel Server machine. In order to secure access to the Administration Console, IIS should be configured to use SSL.
- In production environment, use the Administration Console to create roles and grant permissions to users of the InputAccel system.

Related Topics —

Chapter 3, Installation planning
Administration Console host system considerations, page 24
InputAccel web components and ClickOnce host requirements, page 13
ClickOnce host system considerations, page 25
InputAccel Remoting server considerations, page 25
Installing InputAccel Remoting, page 83

Activating and licensing InputAccel

After installing the InputAccel Server, install your security key, install your licenses, and begin the activation process.

Refer to the Using Administration Console section of the Administration Guide for instructions on security keys and licenses and activating your InputAccel Servers. You may proceed to install InputAccel and start using it for a limited time while waiting for a response to your activation request.

Related Topics —

ScaleServer licensing, page 45
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Activating the InputAccel Server in an Active/Passive cluster, page 74
Activating and licensing the InputAccel Server in an Active/Active cluster, page 80.

Installing the InputAccel Client Components

InputAccel Client modules are software modules that perform specific information capture tasks such as scanning images, enhancing images, performing OCR, indexing data, or exporting images and data. InputAccel also supports third-party InputAccel certified modules. All modules running on client workstations use TCP/IP to connect to the InputAccel Server.

This procedure installs InputAccel client modules and the following additional features:

- Process Developer
- InputAccel Scripting Libraries
- Web services modules and components
- Sample images

Note: Before client modules can be run in production mode, the users that run the Client modules (or groups to which these users belong) must be assigned appropriate permissions through the Administration Console. Otherwise, users will be unable to log in and process tasks. Refer to the Using Administration Console section of the Administration Guide for additional information.

To install InputAccel Client components:

1. Start the InputAccel setup program from the installation media. If the setup program does not start automatically after a few seconds, or if you are running the installation from a local disk or network share, open the file `autorun.exe` to begin.
2. From the **InputAccel Products** menu, select **Install Products**.
3. From the **Installation Choices** menu, select **Step 4 – Install the InputAccel Client Components**.
4. If you are prompted to install prerequisite applications, click **Install** and then click **Next**.
5. Accept the license agreement and then click **Continue**.
6. Select one of the following setup types, and then click **Next**:
   - **Complete**: Installs all InputAccel client features
   - **Custom**: Enables you to select the features to install
7. If you select features that require third-party software that is not already installed on the system, the **Minimum Feature Requirements** window displays and those modules are not installed. After the required third-party software is installed, you can run the InputAccel client installer again to install the appropriate modules. Click **Next** to continue.
8. The **Required Third-party Software** window displays if third-party software that is required to run the client modules is not already installed. Click **Next** to continue. The specified client modules are installed, but will not run until the required third-party software is installed.

9. Click **Next** to install to the default destination directory or click **Change** to select a new location.
10. Select one of the following to specify a user account to use when logging in to the InputAccel Server:
    - **Use the built-in Network Service account**: Uses the credentials for the local machine's Windows Network Service account
    - **Specify a user account**: Uses the credentials specified
11. Select **Install services for all selected modules that can run as services** to install the InputAccel client modules as services.
12. Select **Automatically start all services when the system starts** if you want the InputAccel client modules to be started as a service automatically when the system starts, and then click **Next**.
13. In the **InputAccel Server Connection Information** window, specify the **Server name** and **Server port** of the InputAccel Server to connect to. By default, **Try to contact the server during this installation** is selected. This option enables the setup program to attempt to establish a connection with the InputAccel Server. Click **Next**.
14. If the connection succeeds, click **Next**. If the attempt fails, verify that the InputAccel Server service is started.
15. Select the scanner to use with any of the scanning modules, or select **Do not install a scanner driver at this time** if you do not want to select a scanner. Click **Next**, **Install**, and then **Finish**.
16. If prompted to restart Windows, click **Yes**.
17. Verify that the InputAccel Server service has been started.
18. Verify that the InputAccel client modules have been installed successfully, start a client module by clicking **Start** > **Programs** > **InputAccel** and then selecting the module. The module login window displays.
19. Type your InputAccel Server login credentials, and then click **OK**.

Related Topics —

Chapter 3, Installation planning
Client workstation requirements, page 15
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Installing InputAccel in a production environment

This section explains how to install InputAccel into a typical production environment and adds some complex installation scenarios. This installation includes the option of installing the InputAccel Servers in a clustered environment to ensure high availability.

Server/Machine	Component to install	User Account	Runs as
Server 1	InputAccel Database hosted by Microsoft SQL Server. Configuring SQL Server in a clustered environment for high availability is recommended.	N/A	N/A
Server 2a	InputAccel Server	Domain user in the local Administrators group	Service
Server 2b	InputAccel Server	Domain user in the local Administrators group	Service
Server 3	Administration Console web component	Domain user in the local Administrators group	Service
Server 4	• ClickOnce packages • ClickOnce Deployment Utility • InputAccel Remoting	Domain user in the local Administrators group	**N/A**
Computer 5	ScanPlus	Domain user	Application
Computer 6	RescanPlus	Domain user	Application
Computer 7	IndexPlus	Domain user	Application
Computer 8 (multiple) **Note:** The Web Services Coordinator can only be installed on a single computer in the InputAccel system.	• Web Services Coordinator • Web Services Hosting • Web Services Input • Web Services Output	Domain user	Service only
Computer 9	• Image Enhancement • NuanceOCR	Network Service	Service
Computer 10	Documentum Advanced Export	Network Service	Service

Server/Machine	Component to install	User Account	Runs as
Computer 11	• Multi • Image Divider	Network Service	Service
Computer 12	Multi-Directory Watch	Network Service	Service
Computer 13	Email Import	Network Service	Service
Computer 14 (multiple)	Other unattended client modules	Network Service	Service

To install InputAccel in a typical production environment:

1. Make sure your servers and machines meet the system requirements outlined in Chapter 2, System requirements and recommendations.
2. Install InputAccel Database on Server 1. Refer to Installing the InputAccel Database, page 56 for instructions on installing the InputAccel Database.
3. Install the InputAccel Server. You have the following options:
   - Install the InputAccel Server on a single computer, Server 2. Refer to Installing the InputAccel Server, page 58 for instructions.
   - Install multiple instances of the InputAccel Server on a single computer, Server 2. Refer to Installing multiple instances of the InputAccel Server for instructions.
   - Install the InputAccel Server on multiple computers, Server 2a and Server 2b, and optionally configure them as a ScaleServer group.
   - Install the InputAccel Servers in a clustered environment and then configure them as a ScaleServer group. Refer to Installing the InputAccel Server in a clustered environment for instructions on installing InputAccel Servers in an Active/Passive or Active/Active clustered environment.
4. (Optional) Configure the InputAccel Servers installed on multiple computers as a ScaleServer group. Refer to Configuring multiple InputAccel Servers as a ScaleServer group, page 68 for instructions.
5. Install the Administration Console web component on a web server, Server 3. Refer to Installing the Administration Console, page 60 for instructions.
6. Install attended client modules, ScanPlus, IndexPlus, and RescanPlus as applications on each computer designated for these modules according to the installation plan. Refer to Installing the InputAccel Client Components, page 62 for instructions.

   Note: The ScanPlus, RescanPlus, and IndexPlus modules may optionally be deployed using the ClickOnce Deployment Utility. Users can then download these modules through a web server or network file share. Refer to step 7 for instructions.
7. (Optional. This step is required only if ScanPlus, RescanPlus, and IndexPlus are deployed using the ClickOnce Deployment Utility). Install ScanPlus ClickOnce Package, RescanPlus ClickOnce Package, and IndexPlus ClickOnce Package. Follow the same steps involved in installing client modules. Also, deploy the ClickOnce packages on a web server or network file share by running the ClickOnce Deployment Utility on the same computer.
8. (Optional. This step is required only if the client modules are accessed remotely). Install the InputAccel Remoting web component on a Server 4 running in the network's demilitarized zone

(DMZ) to enable access from the Internet. Refer to Installing InputAccel Remoting, page 83 for instructions.

Note: Administration Console and InputAccel Remoting must be installed on separate servers.

9. Install the Web Services Coordinator, Web Services Hosting, Web Services Input, and Web Services Output client modules on a separate computer.
10. Install the other unattended client modules as services on each computer designated for these modules according to the installation plan.

    Note: For a list of client modules that can be run in unattended mode, refer to Table 10, page 142.
11. Run the Administration Console from any computer on the network to configure the Web Services Coordinator and Web Services Hosting components. Refer to the Using Administration Console section in the Administration Guide for details.

Additional installation and configuration options

This section discusses additional installation and configuration options for the InputAccel system. Topics in this section include:

Installing multiple instances of InputAccel Servers

Multiple instances of the InputAccel Server can be installed on the same computer (also called as side-by-side installation). A maximum of eight instances of InputAccel Server can be installed; although the optimum number is one InputAccel Server instance per pair of processors.

Performance benefits of side-by-side installation include:

- Each server instance runs its VBA engine within its server process, enabling better parallel execution of batches when running on multi-processor computers
- On a 64–bit operating system, the virtual address space is increased to 4 GB for each server instance. This enables more batches to be loaded simultaneously on a single machine.

Note:

- Side-by-side installation is required when installing the InputAccel Server in an Active/Active clustered environment.
- Side-by-side InputAccel Server installations are not compatible with a hardware security key.

To install multiple instances of InputAccel Servers:

1. From the **Installation Choices** menu of the InputAccel 6.0 setup program, select **Step 2 – Install the InputAccel Server**. Click **Next**.
2. From the **Custom Setup** window, select features that you want to install, and then click **Next**. To install multiple instances of the InputAccel Server, make sure that the InputAccel Server feature is selected.
3. Select the number of InputAccel Server instances to install, and then click **Next**.
4. For each instance, click **Change** to specify a unique location for data files for each InputAccel Server, and then click **Next**.

   Note: Each instance must be installed on its own directory. EMC recommends that the specified directories be on separate physical hard disks and the directories reside on an NTFS partition.
5. Specify whether the server instances will be used in an Active/Active clustered configuration.
6. In the **TCP/IP Settings** window:
   - If multiple instances of the InputAccel Server will be used in a clustered configuration, specify the **IP address** and **Port** for each server instance. To simplify client module connections, we recommend using the default port for all server instances.
   - If multiple instances of the InputAccel Server will not be used in a clustered configuration, specify a unique **Port** for each server instance.
7. The **InputAccel Service Accounts** window displays, prompting the user for the run-as credentials to use for new instances being installed. Click **Next**. Specify whether you want the InputAccel Server to be started as a service automatically when the system starts.
8. Click **Install** and then click **Finish** to complete the installation.

   Note:
   - If you choose to start the InputAccel Server as a service automatically when the system starts, the setup program configures only the first InputAccel Server instance to automatically start. All other instances of the InputAccel Server are configured to run as services but are not configured to start automatically. You may use the Service Control Manager to configure these additional instances to start automatically.
   - If you have installed multiple instances of the InputAccel Server in an Active/Active clustered configuration, you will not be able to run both of them on the same node at the same time. You must run both the InputAccel Servers on separate nodes until after you have licensed them. If you attempt to run both servers on the same node at the same time, one of them will not start (due to a lack of a server license containing feature code S) and the cluster services will automatically move the resources for that server to the other node and start it up there.
9. To verify that multiple instances of the InputAccel Server are installed correctly:
   a. Start any module in production mode.
   b. When logging on, specify one of the InputAccel Servers and make sure the module connects.
   c. Repeat these steps for each InputAccel Server instance.

Related Topics —

InputAccel Server requirements, page 12
InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
Upgrading the InputAccel Server, page 120

Configuring multiple InputAccel Servers as a ScaleServer group

A ScaleServer group of InputAccel Servers consists of 2 to 8 individual InputAccel Servers connected to the same network, and licensed and configured to work together as a single information capture system. The installation process for each InputAccel Server is the same as when installing a single InputAccel Server.

ScaleServer technology uses a combination of licensing, server configuration parameters, and technology in the InputAccel Servers themselves. To configure a ScaleServer group, you must obtain server and client licenses that enable the ScaleServer technology. Refer to the Administration Guide to learn more about the licensing feature codes for ScaleServer groups.

Note: InputAccel client modules cannot connect to multiple arbitrary InputAccel Servers - they can only connect to multiple servers that have been configured together as a ScaleServer group. For a list of client modules that are ScaleServer compatible, refer to Table 10, page 142.

To configure a ScaleServer group:

1. Install the required hardware and software on each InputAccel Server computer. Refer to Chapter 2, System requirements and recommendations for details.
2. Install the InputAccel Server software on each server computer.
3. Install the Administration Console web component on a web server.
4. Run the Administration Console module and do the following to configure the ScaleServer group:
   a. For each installed InputAccel Server, be sure to install and activate the Activation File (CAF file) or attach the hardware security key.
   b. Install valid ScaleServer licenses/feature codes on each InputAccel Server that is to be part of the ScaleServer group.

      Note: Each InputAccel Server that is part of a ScaleServer group must have the same ClusterBase value encoded in its license feature codes. Feature codes are established when the InputAccel Server license codes are installed. For details on server feature codes, refer to the Administration Guide.

   c. Specify a ScaleServer group name and add a list of InputAccel Servers in the group.
   d. Configure the same set of users on all InputAccel Servers in the ScaleServer group.

   Refer to the Using Administration Console section in the Administration Guide for information on activating InputAccel Servers, installing license codes, adding users and groups, and specifying a ScaleServer group.

Note: When users running client modules connect to a ScaleServer group, they must specify the InputAccel Server machine name, and not “localhost” or an IP address.

5. To verify that the ScaleServer group is functioning correctly:

   a. Start a ScaleServer-compatible module in production mode. Refer to Table 10, page 142 for a list of modules that are ScaleServer-compatible.

   b. When logging on, select the **Connect to server group** checkbox.

   c. Run the Administration Console and verify that the client module is logged into all servers in the ScaleServer group. Refer to the Using Administration Console section in the Administration Guide for details.

Related Topics —

InputAccel Server requirements, page 12
InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
High availability and failover, page 38
Upgrading the InputAccel Server, page 120
ScaleServer issues, page 137

Installing the InputAccel Server in a clustered environment

This section explains how to install InputAccel within a Microsoft Cluster Server (MSCS) cluster of Windows servers. For InputAccel to function correctly in an MSCS environment, the InputAccel Server and the EMC Captiva Input Management Console (if used) must be configured.

InputAccel works with Microsoft Windows Server 2003 in a cluster configuration. EMC Captiva Input Management Console v.3.1 and later also supports this cluster configuration.

InputAccel can be installed in an Active/Passive cluster configuration and Active/Active cluster configuration.

Note: InputAccel version 6.0 has been tested on an MSCS cluster of two nodes. Other configurations may work, but are not officially supported.

For more information about Microsoft Cluster Server, refer to the Microsoft Cluster Server General Questions on the Microsoft website.

Administrators must run the MSCS Cluster Administrator for all cluster configuration tasks, including defining each virtual server and its failover/failback rules. Refer to Microsoft documentation for more information on the MSCS Cluster Administrator.

System prerequisites

Before configuring InputAccel Server in a Microsoft server cluster, you must make sure your environment meets the following prerequisites:

- Microsoft Distributed Transaction Coordinator (MSDTC) must be installed and Distributed Transaction Coordinator (DTC) access must be enabled.
- Windows Server 2003 must be set up in a clustering configuration on multiple (minimum of two) separate hardware platforms.

- The Microsoft Server Cluster must include a Storage Area Network (SAN) device.

Requirements of the cluster environment:

- Create a cluster environment according to Microsoft best practices. Refer to the Microsoft website to find resources relating to server clusters.
- All computers are members of the same domain.
- Two identically configured node machines are running with Windows Server 2003 R2 Enterprise or Datacenter Edition with Service Pack 2 or greater.
- The cluster service is run under a dedicated domain user account and this account is a member of the local Administrators group on each cluster node.
- There is a default **Cluster Group** containing at least the following three cluster resources: Cluster IP address, Cluster Name, and Quorum drive.
- The resources in the **Cluster Group** can be successfully moved between nodes of the cluster.
- (For Active/Passive cluster environment only.) A second resource group containing just the physical disk resource is dedicated to the InputAccel Server as the data drive. By default, when the cluster is created, this drive is put into a resource group named Group 0.
- (For Active/Active cluster environment only.) Two additional resource groups, each containing a physical disk resource that is dedicated to the InputAccel Server as the data drive for that resource group.

Topics in this section include:

- Installing InputAccel Servers into an Active/Passive MSCS Cluster, page 70
- Installing InputAccel Servers into an Active/Active MSCS cluster, page 75

Installing InputAccel Servers into an Active/Passive MSCS Cluster

Installing InputAccel Servers into an Active/Passive MSCS Cluster environment involves the following steps:

1. Setting up the cluster environment as detailed in Requirements of the cluster environment.
2. Preparing the InputAccel Server resource group for an Active/Passive cluster environment, page 70.
3. Installing the InputAccel Server on both cluster nodes in an Active/Passive cluster, page 72.
4. Adding the InputAccel Server generic service resource to the InputAccel Server Group in an Active/Passive cluster, page 73.
5. Activating the InputAccel Server in an Active/Passive cluster, page 74.

Preparing the InputAccel Server resource group for an Active/Passive cluster environment

Using MSCS Cluster Administrator, define the cluster resources for InputAccel running in a cluster.

Before proceeding with installing InputAccel into the cluster, ensure that the initial cluster configuration looks like the one below. This procedure assumes the cluster environment consists of a small drive Q: for the quorum disk, and a drive R: for the InputAccel Server data disk.

[Cluster Group]

- Cluster IP Address
- Cluster Network Name
- Cluster Physical Disk (Quorum Q:)

[Group 0]

- Physical Disk (R:)

To prepare the InputAccel Server resource group for an Active/Passive cluster environment:

1. In the **Cluster Administrator** window, rename Group 0 to something more descriptive, like "`InputAccel Server Group`". This is the group name that will be used in this procedure.
2. In the left pane, select **InputAccel Server Group**, right-click and select **New** > **Resource** to add an IP address resource.
3. Enter a **Name** and **Description** for the IP address resource.
4. From the **Resource Type** list box, select **IP Address**.
5. From the **Group** list box, select **InputAccel Server Group**, and then click **Next**.
6. In the **Possible owners** list box, verify that both cluster nodes are listed as possible owners, and then click **Next**.
7. In the **Dependencies** window, click **Next**.
8. In the **TCP/IP Address Parameters** window, type the unique static IP address for the InputAccel Server, verify the proposed subnet mask is correct, verify the network is Public, verify that **Enable NetBIOS for this address** is selected, and then click **Finish**.
9. Click **OK** to confirm that the resource has been created.
10. Right-click the InputAccel Server IP Address resource, and then select **Bring Online**. Verify that the resource goes into an online state.
11. In the left pane, right-click **InputAccel Server Group**, and then select **New** > **Resource** to add a Network Name resource.
12. Type a **Name** and **Description** for the resource.
13. In the **Resource Type** list box, select **Network Name**.
14. In the **Group** list box, verify that the **InputAccel Server Group** is already selected, and then click **Next**.
15. In the **Possible Owners** list box, verify that both cluster nodes are listed as possible owners, and then click **Next**.
16. In the **Dependencies** window, add the InputAccel Server IP Address as a resource dependency, and then click **Next**. The **Network Name Parameters** window is displayed.
17. In the **Name** field, type the network name for the InputAccel Server (the name which client modules use to connect) such as IASERVER, and select **DNS Registration Must Succeed** and **Enable Kerberos Authentication**, and then click **Finish**.
18. Click **OK** to confirm that the resource has been created.
19. Right-click the InputAccel Server Network Name resource, and then click **Bring Online**.

20. Verify the resource goes into an online state.

The cluster nodes are now created. InputAccel Server can be installed on both cluster nodes.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Active MSCS cluster, page 75

Installing the InputAccel Server on both cluster nodes in an Active/Passive cluster

Before installing the InputAccel Server, ensure all the Cluster Group and **InputAccel Server Group** resources can be successfully moved between nodes.

To install the InputAccel Server on both cluster nodes:

1. Prepare the InputAccel Server resource group for an Active/Passive cluster environment.
2. In Cluster Administrator, right-click **Cluster Group**, and then click **Move Group**.
3. Verify that the Cluster Group resources are now owned by the other node (NODE2) and that they are all online.
4. Right-click the **InputAccel Server Group**, and then click **Move Group**.
5. Verify that all resources in this group are now owned by the other node (NODE2) and that they are all online.
6. Repeat steps 2 through 5 to move the Cluster Group and **InputAccel Server Group** resources back to the first node (NODE1) and verify that they all come online.
7. Begin installation of the InputAccel Server on the first node (the node that is currently the owner of all the **InputAccel Server Group** resources).
8. Run the InputAccel Server installer and begin server installation according to the installation instructions, making exceptions to the default installation process as described below:
   a. In **Setup Type**, select **Custom installation**, and then click **Next**.
   b. In **Side by Side Setup**, do not change the default of the first server instance, and then click **Next**.
   c. In **Destination Folder for Server application files**, type the name of a directory on the local boot drive, such as the default `C:\Program Files\InputAccel\Server\`.
   d. In **Data Files Destination for Server data files**, change the drive letter to match the letter of the physical disk resource that is in your InputAccel Server Group, such as `R:\IAS\`.
   e. In **InputAccel Service Accounts**, do not change the default of the **Use the same settings for all services** checkbox.
   f. For **Run all services with the following credentials**, select **Specify a user account** and type a domain user account that is a member of the local Administrators group on the computer on which InputAccel Server is installed.

g. In **Start Services Automatically**, select **No**, then click **Next**.

h. When the installation wizard is complete, clear the **Start the InputAccel Server service when setup completes** checkbox, and click **Next**, then click **Finish**.

9. In Cluster Administrator, right-click **InputAccel Server Group**, and then select **Move Group** to move all **InputAccel Server Group** resources to the second node (NODE2).

10. Verify that all resources in this group are now owned by the second node (NODE2) and that they are all online.

11. Install the InputAccel Server. On the physical computer of the second node, launch the InputAccel Server installer and begin server installation again.

12. Repeat steps 7 and 8. Specify the same Data Files Destination for Server data files (`R:\IAS\` for example) as for the first node and use the same domain user account for running the InputAccel Server services as on the first node. Be sure this user account is part of the local Administrators group on the second node.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Active MSCS cluster, page 75

Adding the InputAccel Server generic service resource to the InputAccel Server Group in an Active/Passive cluster

Adding the InputAccel Server as a generic service resource to the InputAccel Server Group completes the installation of the InputAccel Server in the cluster.

To add the InputAccel Server generic service resources to the InputAccel Server Group:

1. Prepare the InputAccel Server resource group for an Active/Passive cluster environment.

2. Install the InputAccel Server on both cluster nodes in an Active/Passive cluster.

3. Run Cluster Administrator on one of the two cluster nodes.

4. Right-click the **InputAccel Server Group**, and then select **New** > **Resource**.

5. Type a **Name** and **Description** for the resource.

6. From the **Resource Type** list box, select **Generic Service**.

7. In the **Group** list box, verify that **InputAccel Server Group** is already selected and click **Next**.

8. In the **Possible Owners** list box, verify that both cluster nodes are listed as possible owners and click **Next**.

9. In the **Dependencies** window, add the physical disk (for example, Disk R) and IA Server Network Name resource dependencies, and then click **Next**.

10. In the **Service Name** field, type **`InputAccel`**.

11. Select the **Use Network Name for computer name** checkbox, and then click **Next**.

12. In the **Registry Replication** window, click **Finish**.
13. Click **OK** to confirm that the resource has been created.
14. Right-click the InputAccel Server Service, and then select **Bring Online**.
15. Verify the resource goes into an online state.

The InputAccel Server is now installed in an Active/Passive cluster environment. The next step is to activate and license the server.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Active MSCS cluster, page 75

Activating the InputAccel Server in an Active/Passive cluster

To activate and license the InputAccel Servers in an Active/Passive cluster, the InputAccel Server must be activated twice; once for each node in the cluster. To activate the InputAccel Server, you must install the two activation files (.CAF) supplied by EMC.

To activate and license the InputAccel Server:

1. Install the Administration Console on a separate web server, using the InputAccel Web Components installer.
2. Run Administration Console.
3. From the navigation panel, select **Licensing/Security**, and then select **View All Server Activations**. The **Server Activations** pane displays the InputAccel Server name using the network name defined in the cluster.
4. Select this server, and then **Browse** to the location and name of the CAF file, and then click **OK** to install it. After you have installed the CAF file, the status on the **Server Activations** page changes to “Initial Grace Period”.
5. Select the InputAccel Server, and then click **Activate Server**. The **Activate Server** window displays prompting you for the activation key. Write down the Server Serial Number and Profile ID displayed in this window and then click **Cancel**.
6. Run Cluster Administrator to switch to the other node.
7. Right-click the **InputAccel Server Group**, and then click **Move Group**. Verify that all the resources come online again on the other node.
8. Run Administration Console and navigate to the **Server Activations** page. Notice that the activation status has now changed to “MSCS Cluster Grace” and the Profile ID is different than it was on the other node, but the Server ID and Server name have not changed.
9. Select the InputAccel Server name, and then click **Activate Server**. Write down the Server Serial Number and Profile ID.

10. Select the **Online InputAccel Server Activation** link, or go to http://activation.captivasoftware.com and request activation keys for both the Profile IDs. Submit both the Profile IDs, each with the same Server Serial Number.
11. When you receive the activation keys from EMC, you can activate the InputAccel Server for each node. Run Administration Console and navigate to the **Server Activations** page.
12. Select the Server name, and click **Activate Server**. The **Activate Server** window displays.
13. Type the activation key for the first InputAccel Server Profile ID, and then click **OK**. The **State** column for the server displays "Activated".
14. Run Cluster Administrator to switch to the other node.
15. Right-click the **InputAccel Server Group**, and then click **Move Group**. Verify that all the resources come online again on the other node.
16. Run Administration Console and navigate to the **Server Activations** page.
17. Repeat steps 12 and 13 to activate the second InputAccel Server Profile ID.
18. Once the InputAccel Server has been fully activated on each cluster node, move the **InputAccel Server Group** between the nodes and verify in Administration Console that the **State** column displays "Activated" state for both nodes.

The InputAccel Server is now ready to use in an Active/Passive cluster.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Active MSCS cluster, page 75

Installing InputAccel Servers into an Active/Active MSCS cluster

Installing InputAccel Servers into an Active/Active MSCS Cluster environment involves the following steps:

1. Setting up the cluster environment as detailed in Requirements of the cluster environment.
2. Preparing the InputAccel Server resource groups for an Active/Active cluster, page 76.
3. Installing the InputAccel Server on both Active/Active cluster nodes, page 77.
4. Adding the InputAccel Server generic service resource to each IA Server Group in an Active/Active cluster, page 79.
5. Activating and licensing the InputAccel Server in an Active/Active cluster, page 80.

Preparing the InputAccel Server resource groups for an Active/Active cluster

Using MSCS Cluster Administrator, define the cluster resources for InputAccel running in a cluster.

Before proceeding with installing InputAccel into the cluster, ensure that the initial cluster configuration looks like the one below. This procedure assumes the cluster environment consists of a small drive Q: for the quorum disk, and drive R: and drive S: for the two InputAccel Server data disks.

[Cluster Group]

- Cluster IP Address
- Cluster Network Name
- Cluster Physical Disk (Quorum Q:)

[Group 0]

- Physical Disk (R:)

[Group 1]

- Physical Disk (S:)

To prepare the InputAccel Server resource groups:

1. In the **Cluster Administrator** window, rename Group 0 to something more descriptive, like "**`IAServer1 Group`**" and Group 1 to "**`IAServer2 Group`**".
2. Right-click **IAServer1 Group**, and then select **New** > **Resource** to add an IP address resource to the **InputAccel Server1 Group**.
3. Type a **Name** and **Description** for the IP address resource.
4. In the **Resource Type** list box, select **IP Address**.
5. In the **Group** list box, verify that **IAServer1 Group** is already selected, and then click **Next**.
6. In the **Possible Owners** window, verify that both cluster nodes are listed as possible owners, and then click **Next**.
7. In the **Dependencies** window, click **Next**.
8. In the **TCP/IP Address Parameters** window, type the unique static IP address for **IAServer1 Group**, verify that the specified subnet mask is correct, verify the network is Public, verify that the **Enable NetBIOS for this address** checkbox is selected, and then click **Finish**.
9. Click **OK** to confirm that the resource has been created.
10. Right-click the **IAServer1 Group** IP Address resource, and then select **Bring Online**. Verify the resource goes into an online state.
11. Right-click the **IAServer1 Group**, and then select **New** > **Resource** to add a network name to **IAServer1 Group**.
12. Type a **Name** and **Description** for the network name.
13. In the **Resource Type** list box, select **Network Name**.
14. In the **Group** list box, verify that **InputAccel Server1 Group** is already selected, and then click **Next**.
15. In the **Possible Owners** window, verify that both cluster nodes are listed as possible owners, and then click **Next**.

16. In the **Dependencies** window, add the IAServer1 Group IP Address as a resource dependency, and then click **Next**.
17. In the **Name** field, type the network name for the IAServer1 Group (the name which client modules use to connect) such as IASERVER1.
18. Select both the **DNS Registration Must Succeed** and **Enable Kerberos Authentication** checkboxes, and then click **Finish**.
19. Click **OK** to confirm that the resource has been created.
20. Right-click the IAServer1 Group Network Name resource, and then select **Bring Online**. Verify that the resource goes into an online state.
21. Repeat steps 2 through 20 for the IAServer2 Group and give the resources names that indicate they are for the second InputAccel Server.

The cluster nodes are now created. InputAccel Server can be installed on both cluster nodes.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Passive MSCS Cluster, page 70

Installing the InputAccel Server on both Active/Active cluster nodes

Before installing the InputAccel Servers, make sure that all the Cluster Group and IAServer Group (1 and 2) resources can be successfully moved between nodes.

To install the InputAccel Servers on both cluster nodes:

1. Prepare the InputAccel Server resource groups for an Active/Active cluster.
2. Run Cluster Administrator, right-click **Cluster Group**, and then select **Move Group**. Verify that the Cluster Group resources are owned by the other node (NODE2) and that they are all online.
3. Right-click **IAServer1 Group**, and then click **Move Group**.
4. Verify that all resources in this group are now owned by the other node (NODE2) and they are all online.
5. Right-click **IAServer2 Group**, and then select **Move Group**.
6. Verify that all resources in this group are now owned by the other node (NODE2) and they are all online.
7. Repeat the steps above to move all the groups (Cluster Group, IAServer1 Group, and IAServer2 Group) resources back to the first node (NODE1) and verify they all come online.
8. Begin installation of the InputAccel Server on the first node (the one that is currently the owner of all the IAServer1 Group and IAServer2 Group resources).
9. Run the InputAccel Server installer and begin server installation according to the installation instructions, making exceptions to the default installation process as described below.
    a. In **Setup Type**, select **Custom installation** and click **Next**.

b. In **Side by Side Setup**, choose to install two InputAccel Server instances and click **Next**.

Note: For Active/Active cluster, it is essential to install two InputAccel Server instances on each node.

c. In **Destination Folder for Server application files**, specify a directory on the local boot drive, such as the default `C:\Program Files\InputAccel\Server\`.

d. In **Data Files Destination for Server data files**, change the drive letter for the first InputAccel Server to match the drive letter of the physical disk resource that is in the **IAServer1 Group**, such as `R:\IAS\`.

e. In the same **Data Files Destination** window, change the drive letter and path for the second InputAccel Server to match the drive letter of the physical disk resource that is in the **IAServer2 Group**, such as `S:\IAS\`.

Note: It is essential that the two InputAccel Server instances configured on this node use different physical disks for their respective server data file directories (for example, IAS directory).

f. In **InputAccel Service Accounts**, under **Run all services with the following credentials**, click **Specify a user account** and enter a domain user account that is a member of the local Administrators group on the computer where the InputAccel Server is installed. Clear the **Automatically start services when the system starts** checkbox.

Note: It is important that none of the InputAccel Server services installed are allowed to start up after installation, nor should any of the services be configured to autostart for subsequent reboots of the computer.

10. When the installation wizard is complete, clear the **Start the InputAccel Server service when setup completes** checkbox, click **Next**, then click **Finish**.
11. When complete, this installation should have created two new Windows services, all of which are set for manual startup, and none of which is currently started.
12. In Cluster Administrator, right-click **IAServer1 Group**, and then click **Move Group** to move all **IAServer1 Group** and **IAServer2 Group** resources to the second node.
13. Move the **IAServer2 Group** to the second node in the same way.
14. Verify that all resources in both groups are now owned by the second node (for example, NODE2) and they are all online.
15. On the physical computer of the second node, launch the InputAccel Server installer and begin server installation again to install the InputAccel Servers on the second node.
16. Repeat these steps for the second node.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Passive MSCS Cluster, page 70

Adding the InputAccel Server generic service resource to each IA Server Group in an Active/Active cluster

Adding the InputAccel Server as a generic resource to each IA Server Group completes the installation of the InputAccel Server in the cluster.

To add the InputAccel Server generic service resource to each IA Server Group:

1. Prepare the InputAccel Server resource groups for an Active/Active cluster.
2. Install the InputAccel Server on both nodes as detailed in Installing the InputAccel Server on both Active/Active cluster nodes.
3. Run Cluster Administrator on either node to configure **IA Server1 Group** resources.
4. Right-click IAServer1 Group, and then select **New > Resource**.
5. Type a **Name** and **Description** for the new resource.
6. In the **Resource Type** list box, select **Generic Service**.
7. In the **Group** list box, verify that **IAServer1 Group** is already selected and click **Next**.
8. In the **Possible Owners** window, verify that both cluster nodes are listed as possible owners and click Next.
9. In the **Dependencies** window, add the physical disk (for example, Disk R:) and IA Server1 Network Name resource dependencies, and then click **Next**.
10. In the **Service Name** field, enter a service name, for example, InputAccel.
11. Select the **Use Network Name for computer name** checkbox and click **Next**.
12. In **Registry Replication** window, click **Finish**.
13. Click **OK** to confirm that the resource has been created.
14. Right-click the **IAServer1 Group** service, and then click **Bring Online**.
15. Verify that the resource goes into an online state.
16. Right-click on the **IAServer1 Group** service again, and then click **Move Group**.
17. Verify that all the IAServer1 Group resources move to the first node and are online.
18. Repeat steps 3 through 17 to configure IAServer2 Group resources.
19. Right-click the IAServer2 Group service, and then click **Bring Online**.
20. Verify that the IAServer2 Group service successfully comes online on Node 2.

Caution: Until the InputAccel Servers are licensed, you will not be able to run both of them on the same node at the same time. You must run both the InputAccel Servers on separate nodes until after you have licensed them. If you attempt to run both servers on the same node at the same time, one of them will not start (due to a lack of a server license containing feature code S) and the cluster services will automatically move the resources for that server to the other node and start it up there.

21. Right-click **IAServer1 Group** and select **Properties** to set the Preferred node for each InputAccel Server group. The purpose of using an Active/Active cluster is to have just one InputAccel Server

run on each cluster node, and only have two InputAccel Servers running on the same node in the event that one of the nodes fails. Setting a preferred owner for each of the InputAccel Servers ensures that, by default, the InputAccel Servers do not run on the same node.

22. On the **General** tab, click **Modify**.
23. In the **Modify Preferred Owners** window, click **NODE1** and move it over to the **Preferred owners** column, then click **OK**.
24. Repeat the previous step with the **IAServer2 Group** and set its Preferred owner value to **NODE2**.

The InputAccel Server is now installed in an Active/Active cluster environment. The next step is to activate and license the server.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Passive MSCS Cluster, page 70

Activating and licensing the InputAccel Server in an Active/Active cluster

To activate and license the InputAccel Server in Active/Active cluster, you must activate the InputAccel Server twice, once for each node in the cluster using the two Activation IDs you received from EMC.

To activate and license the InputAccel Server:

1. Install the Administration Console on a separate web server, using the InputAccel Web Components installer.
2. Run Administration Console.
3. From the navigation panel, select **Licensing / Security**, and then select **View Server Activations**. The **Server Activations** pane displays both InputAccel Servers listed with their network names followed by their service names, for instance IASERVER1 (InputAccel) and IASERVER2 (InputAccel2). The Server ID is 0 on both of them, and the state is “Not Activated”.
4. On the **Server Activations** pane, select the first server (IASERVER1 for example) and **Browse** to the location of the cluster CAF file intended for the first server, and select the CAF file.

   Note: A CAF file that is not intended for a cluster cannot be installed in a cluster environment.
5. Repeat the previous step for the second server. Both InputAccel Servers display an activation state of “Initial Grace Period.”

   Note: You cannot use the same CAF file for both servers.

   To activate the servers, you need four Profile IDs and two Server IDs for the two InputAccel Servers in the cluster. To obtain these Profile IDs, each InputAccel Server must be run on each clustered node, as the Profile ID is different on each node.
6. Run the Cluster Administrator and start IASERVER1 on Node 1 and IASERVER2 on Node 2.
7. Run Administration Console and navigate to the **Server Activations** page.

8. Select IASERVER1, and then click **Activate Server**. Write down the Server Serial Number and Profile ID. Repeat for IASERVER2.
9. Use Cluster Administrator to move each InputAccel Server to the other node. Now repeat steps 7–8 and obtain the second set of Serial Numbers and Profile IDs.
10. In the **Server Activations** page in Administration Console, select the **Online InputAccel Server Activation** link, or go to http://activation.captivasoftware.com and request activation keys for the four Profile IDs. For each profile ID, provide the Server Serial Number.
11. When you receive the activation keys from EMC, you can activate the InputAccel Server for each node. Run Administration Console and navigate to the **Server Activations** page.
12. Select the Server name, and click **Activate Server**. The **Activate Server** window displays.
13. Type the activation key for the first InputAccel Server Profile ID, and then click **OK**. The **State** column for the server displays "Activated".
14. Repeat steps 12–13 for the second InputAccel Server.
15. Run Cluster Administrator to move each InputAccel Server to the other node.
16. Repeat steps 10–14 to activate the InputAccel Servers on the other node.
17. Now use the Cluster Administrator to move the **InputAccel Server groups** to the other node again and verify that they remain activated in Administration Console. Also move the **InputAccel Server groups** so that both servers are running on Node 1, verify they are activated, then move both groups to Node 2, and verify again they are activated.

The installation of two InputAccel Servers into an Active/Active cluster is complete.

Related Topics —

Disaster planning, page 40
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46
Installing InputAccel Servers into an Active/Passive MSCS Cluster, page 70

Setting up the Input Management Console in an MSCS cluster

This section explains how to set up the Input Management Console in a clustered server configuration. This configuration is used to monitor and control an InputAccel Server that has also been configured in an MSCS cluster.

Note: Refer to the Input Management Console documentation for the system requirements to install the product.

Prerequisites

Before configuring the Input Management Console in an MSCS environment, make sure the cluster environment meets the following prerequisites:

- Microsoft Distributed Transaction Coordinator (MSDTC) is installed and DTC access is enabled before the cluster is configured.

- Windows Server 2003 is set up in a clustering configuration on multiple (at least two) separate hardware platforms. IIS must be installed and running on each of these platforms, and must be configured to enable ASP. In addition, set the necessary permissions on the web folders for each of these nodes.
- The Microsoft Server Cluster must include a Storage Area Network (SAN) device. When Input Management Console is installed, its database (usually Microsoft Access) must be installed on the SAN.

To install and configure the EMC Captiva Input Management Console:

1. Obtain a valid Input Management Console license from VSR Networks.
2. Run the EMC Captiva Input Management Console setup program from the InputAccel installation menu to install Input Management Console on each node of the Microsoft Cluster Server.
3. When setup completes, create the necessary database (Microsoft Access, by default) on the SAN.
4. Configure the database connectivity for the Input Management Console to use the database you created on the SAN.
5. Configure the Cluster Application Wizard to enable the InputAccel and Input Management Console to work in the clustered environment:
   a. Run Cluster Administrator. Connect to the cluster hosting the InputAccel Server.
   b. Click **Configure Application** to run the Cluster Application Wizard.
   c. In the **Select Or Create A Virtual Server** panel, select **Use an existing virtual server**, then click **Next**.
   d. In the **Create Application Cluster Resource** panel, click **Yes, create a cluster resource for my application now**, then click **Next**.
   e. In the **Application Resource Type** panel, select **Generic Service** in the **Resource Type** field, then click **Next**.
   f. In the **Application Resource Name And Description** panel, type a **Name** and **Description**.
   g. Select **Advanced Properties** and navigate to the **Dependencies** tab. Click **Modify**. The **Modify Dependencies** window displays.
   h. Under **Available Resources**, select the Cluster Name, SAN drive(s), InputAccel Server, and the MSDTC Resource. Then move these selections to the **Dependencies** column.
   i. Click **OK**. The Cluster Application Wizard populates the **Resource Dependencies** area of the **Advanced Resource Properties** window. Click **OK**.
   j. In the **Generic Service Parameters** panel, type **`RevMonSvc`**.
   k. In the **Registry Replication** panel, click **Next**.
   l. In the **Completing Application Wizard** panel, click **Finish**.
6. Run the Input Management Console InputAccel wizard to complete the configuration.
   a. Start the Input Management Console and either create a new monitor or view an existing monitor.
   b. Select **File > Run Setup Wizards** to display the **Resource Function Setup Wizards** window.
   c. Select **InputAccel Wizard** from the list of wizards, then click **OK**.

d. In the **Web Server** field, type the MSCS cluster name used for the web server and InputAccel Server.

Note: The web server and InputAccel Server both must be running on an MSCS clustered server.

e. In the InputAccel Server field, type the user name in the format *Username*.

Note:

- If you receive permissions errors when you start the Reveille monitor service, then double-click the object causing the error and type the login credentials as *DomainName\Username* in the **Username** field, then type the password. Repeat as necessary on multiple objects in the monitor.
- You may need to change the logon parameters for the Reveille monitor service.

The Input Management Console is now installed and configured for use with InputAccel in a clustered environment.

Note: Input Management Console requires the `IASYSMON` license within InputAccel licensing to enable Input Management Console to connect to the InputAccel Server. Contact your account manager to obtain the appropriate license.

Related Topics —

Installing InputAccel Servers into an Active/Passive MSCS Cluster, page 70
Installing InputAccel Servers into an Active/Active MSCS cluster, page 75
Installing EMC Captiva Input Management Console, page 96

Installing InputAccel Remoting

The InputAccel Remoting web component must be installed on a web server if client modules are accessed remotely.

To install InputAccel Remoting:

1. From the **Installation Choices** menu of the InputAccel 6.0 setup program, select **Step 4 – Install the InputAccel Web Components**.
2. If you are prompted to install prerequisite applications, click **Install**.
3. Click **Next**.
4. In the **License Agreement** window, select **I accept the terms in the license agreement**, and then click **Continue**.
5. In the **Custom Setup** window, select InputAccel Remoting as the feature to install, and then click **Next**.

   Note: The Administration Console and InputAccel Remoting features are incompatible and cannot be installed on the same computer.
6. In the **Destination Folder** window, click **Next** to install to the default destination directories. Otherwise, click **Change** to select a new location.

7. In the Data Access Layer Registration window, enter the **Login ID** and **Password** credentials for connecting to the SQL Server, and then click **Next**. By default, **Register the Data Access Layer with the InputAccel database** is selected and the local Database server on Port 1433, and InputAccel Database are specified. (The default SQL Server Express port is 1096.)
8. In the **InputAccel Web Site User Account** window, specify the **Username**, **Password**, and **Domain** credentials for the Windows user account that will run the InputAccel Web Components website.
9. In the InputAccel Web Components window, specify the following:
   a. In the **InputAccel web site description** field, enter a description for the web components website.
   b. From the **IP address to use for this web site** list, select the appropriate IP address.
   c. In the **TCP port this web site should use** field, enter the port number and then click **Next**.

   Note: If the selected port is already in use, the **TCP Port Conflict** window displays. To disable the website currently assigned to the port, select **Stop the web site. It will no longer be available unless you reconfigure it**.
10. In the **InputAccel Server Connection Information** window, specify the **Server name** and **Server port** of the InputAccel Server to which the InputAccel Remoting component must connect. Click **Next**.
11. In the **InputAccel remote Access** window, specify a virtual web directory. This directory is used to enable client modules access to the InputAccel Server and the InputAccel Database. Click **Next**.
12. Click **Install** and then click **Finish**.
13. To verify that InputAccel Remoting is installed correctly:
    a. Start ScanPlus, RescanPlus, or IndexPlus in production mode.
    b. Specify the URL of the InputAccel Remoting server in the **Server name** field.
    c. Confirm that the module connects to the InputAccel system.

Related Topics —

Chapter 3, Installation planning
Installing the Administration Console, page 60
InputAccel Remoting server considerations, page 25

Deploying modules with the ClickOnce Deployment Utility

InputAccel includes these web-deployable client modules: ScanPlus, RescanPlus, and IndexPlus. InputAccel also includes a ClickOnce Deployment Utility that provides administrators with an alternate (and optional) method to deploy these modules. The utility copies the necessary programs and application files to the customer's web server or network file share based on the customer's specific environment. Depending on the parameters set by the administrator, prerequisite software is installed on the client workstation during deployment, and updates are automatically downloaded and installed as necessary. This enables administrators to install and maintain software for users in distributed locations.

Prerequisites

- You must acquire a valid SSL certificate in .PFX format for the application that is deployed using the ClickOnce Deployment Utility. Administrators can use any authorized Signing Authority (VeriSign, for instance) for acquiring the SSL certificate.
- You must have ClickOnce publishing skills and ClickOnce technology know-how before choosing a ClickOnce deployment strategy.
- If the ClickOnce application is to be deployed to a website and downloaded using a URL, use the IIS Manager snap-in feature of the Microsoft Management Console to configure the web server as follows for each installation package:
  - For each installation package you want to deploy via ClickOnce, create a virtual directory under the InputAccel Web Components website. (Each installation package must have its own virtual directory.)
  - For each of the virtual directories created, set the Virtual Directory Access Permissions to "Read", "Run Scripts (such as ASP)", and "Write". Do not enable "Execute" permissions.
  - For each of the virtual directories created, configure the Security settings so that the connecting user (for example, the Internet Guest Account user) has Read, Write, and Modify permissions set to "Allow."
  - Under IIS Web Service Extensions, change the WebDAV Service Extension **Status** field from "Prohibited" to "Allowed".

To deploy modules with the ClickOnce utility:

1. Install the ScanPlus ClickOnce Package, RescanPlus ClickOnce Package, and IndexPlus ClickOnce Package from the client installer. (You must run the ClickOnce Deployment Utility on the computer where the packages have been installed.)
2. Select **Start** > **Programs** > **InputAccel** > **ClickOnce Deployment Utility** to run the ClickOnce Deployment Utility. The **Deploy InputAccel Application** window displays.
3. Select an application to deploy, set other basic deployment parameters, and supply a URL where application support can be obtained:
   a. Select **Application** from the navigation panel. The Application Options pane displays.
   b. Select the ClickOnce application to deploy from the **Select an application to deploy** list box.
   c. Under **Provide application deployment options**, select the options appropriate for the deployment. Also, accept the default values for the options selected or provide the values applicable:
      - **Publish version**: Version of the deployed application.
      - **Publisher**: Name of the organization deploying the module.
      - **Product**: The name of the deployed module.

      Support URL: The URL where support information for the module resides. The default location is http://www.emc.com/captiva
4. Set parameters for deployment, such as the URL for the application, installation location, and whether users access the application only online or only through the application's URL:
   a. Select **Deployment** from the navigation panel to display the **Deployment Options** pane.

b. Under **General deployment options**, select the options appropriate for the deployment. Also, accept the default values for the options selected or provide the values applicable:

- **Application URL**: The URL or network file share that will be used to access the ClickOnce application. The URL should not include the deployment manifest name. For example, if the URL is set to `http://server` for the ScanPlus application, the ClickOnce utility writes `http://server/ScanPlus.application` to the deployment manifest.
- **Installation URL**: The URL or network file share where the application files are copied. If this parameter is not specified, the files are copied to the Application URL.
- **Use a ".deploy" file name extension**: Select to add a ".deploy" extension to application files. This value is set to `Yes` by default.
- **Allow URL parameters to be passed to the application**: Select to enable query strings to be passed to the application. This parameter is set to `Yes` by default. This parameter ensures that the deployed application (accessed by the application URL) can be run by users in setup mode.

Caution: Setting this parameter to **No** prevents the application from running in setup mode or passing login information.

c. Under **Choose installation mode**, select the options appropriate for the installation of the application. Also, accept the default values for the options selected or provide the values applicable:

- **The application is only available online**: Select to make the application available from the location specified in the **Application URL** field.
- **The application should be installed locally**: Select to make the application available from the Windows **Start** menu. The application can then be uninstalled from the Windows **Control Panel**.

5. (Optional) Specify options that determine how often the module checks for updates, the location where updates can be obtained, and the base version of the application to use when checking for available updates:

Note: Automatic updates can only be scheduled for local installations.

a. Select **Update** from the navigation panel. The **Update Options** pane displays.

Note: The **Update Options** pane is available only when an application is deployed locally. If the installation mode is set to **The application is only available online** on the **Deployment Options** pane, a warning note displays a **Modify deployment options...** link. Click this link to return to the **Deployment Options** pane. Select **The application should be installed locally** option to enable the **Update Options** pane.

b. From the **Update Options** pane, select the options appropriate for the deployment.

- **The application should check for updates**: Select to ensure that the application checks for updates based on the frequency and version specified.
- **Choose when the application should check for updates**: Select the appropriate option so the module checks for updates either before or after starting.
- **Choose how often the application should check for updates**: Specify how often the module should check for updates.

- **Specify URL from which the application updates should be downloaded**: Type the URL where the application resides and where updates can be obtained.
- **Specify a minimum required version for the application which can updated**: Specify a base version of the application to be used for updates.

6. (Optional) Create a bootstrap installation program for installing prerequisites required by the module being deployed. This is selected by default. This enables automatic installation of module prerequisites (.NET Framework 2.0 SP1, MDAC 2.8, and Visual C Runtime) as part of the deployment process:

   a. Select **Prerequisites** from the navigation panel. The **Prerequisites and Bootstrap Options** pane displays.

   b. Select the options appropriate for the deployment:

   - **Create setup program to install prerequisite components**: Select to create a bootstrap installation program that installs prerequisite components as part of the deployment process.
   - **Specify the install location for prerequisites**: Select a location where the prerequisite components reside. This location may be a vendor's website, the same location as the application being deployed, or any other accessible location. To specify a URL or file path, select the **Download prerequisites from this location** option, and type a valid path in the associated field.

   Note:

   - Administrative access may be needed for users to install prerequisites.
   - If the client computer does not have Visual C Runtime installed, the module fails to connect to the InputAccel Server.

7. Specify how the application should sign the deployment manifest. Signing can be done from a password protected file, or from a stored certificate, and can be associated with a timestamp to reduce issues that might be encountered if a certificate used for signing has expired.

   a. Select **Signing** from the navigation panel. The **Deployment Manifest Signing Options** pane displays.

   b. Under **Choose how to sign the deployment manifest** area, select from the following options:

   - **Sign the deployment manifest with this certificate file**
     - In the **File** field, type the file name and location for the certificate file, or click the **Browse** button to browse to the correct file.
     - In the **Password** field, type the password for the certificate file, if necessary.
   - **Sign the deployment manifest with a stored certificate:**
     - In the **Certificate:** field, type the name and path of the stored certificate, or click the **Select** button to select a certificate stored on the local system.

   c. In the **Timestamp URL:** field, type the URL of a supported time stamping service to populate the certificate with a current time and date during the publishing process. When a published application's certificate expires, the time stamp service can be called upon by the client to verify whether the application was signed while the certificate was still valid, enabling the expired certificate to remain in use.

8. If the ClickOnce application is deployed to a website and downloaded using a URL, be sure the necessary prerequisites and permissions have been configured as explained under Prerequisites.

9. Click the **Deploy** button to deploy the selected application with the selected settings.
10. Provide the URLs, IP addresses, or **Share name** of the deployment that users need to install the applications.
11. To verify that the ClickOnce modules are deployed correctly, click the link provided in the **Deployment successfully finished** dialog box.

    If the deployment fails, the ClickOnce Deployment Utility displays a message indicating the error that occurred. The three most likely errors are due to incorrect configuration of items listed in Prerequisites:

    - (401) Unauthorized: This error will occur if the virtual directory permissions are not set correctly.
    - (404) Not Found: This error will occur if the virtual directory properties grant the user full Execute permissions. Change the permissions to Execute Scripts Only.
    - (501) Not Implemented: This error will occur if the WebDAV Web Service Extension is not set to "Allowed."

Related Topics —

Chapter 3, Installation planning
Installing the Administration Console, page 60
InputAccel web components and ClickOnce host requirements, page 13
ClickOnce host system considerations, page 25
Installing InputAccel Remoting, page 83

Unattended installations

The InputAccel installers enable you to perform unattended and silent installations of InputAccel. Unattended installations are performed without user interaction during its progress. It also enables users to perform remote installations of InputAccel. A silent installation does not display messages or windows during its progress. A command line is used to specify the InputAccel features to install and the configuration settings. The command line consists of variables known as "installer properties" which define the features to install and the configuration of the installation. The installer properties are simple key/value pairs specified by ***PROPERTY=VALUE*** syntax.

Install InputAccel components in the following order when you perform a silent installation:

1. InputAccel Database
2. InputAccel Server
3. InputAccel Web Components
4. InputAccel Client Components

Refer to the Command line instructions section for examples of command lines that silently install InputAccel.

This section includes the following topics:

- Understanding installation command line arguments, page 89
- Command line considerations, page 90

Understanding installation command line arguments

The following command line arguments are required when installing InputAccel features in unattended or silent mode:

Table 7. InputAccel installation command line arguments

Argument	Description
`Setup.exe`	Use the `Setup.exe` located on the installation media. in the following directories to access the directory where the InputAccel Microsoft Installer (MSI) files reside: • `Databases\setup.exe`: Installs the SQL database used for storing configuration settings, batch data, and information for logging and reporting purposes. • `Server\setup.exe`: Installs the InputAccel Server. • `Clients\setup.exe`: Installs the InputAccel client modules. • `WebComponents\setup.exe`: Installs Administration Console and InputAccel Remoting.
/s	InstallShield argument that executes a silent setup.
/v	InstallShield argument that passes command line options and values of public properties to `msiexec.exe`. The entire MSI argument line must be enclosed in quotes immediately following the /v switch. For example, enable logging of installer messages to the file `c:\temp\logfile.txt` as follows: setup.exe /v"/l*v "c:\temp\logfile.txt"" x/v is an InstallShield argument and the /l*v are `msiexec.exe` arguments. Include the "*" wildcard parameter (encompasses all parameters except the verbose parameter) along with the v, or verbose, parameter, to create a detailed log of the installation.
/l	InstallShield argument that creates a log file that can be used to troubleshoot installation issues.

Argument	Description
`Msiexec.exe` arguments	Specifies an installer action: For example: • /i: Install. • /f: Repair. • /x: Remove. **Note:** The /i argument is the default and does not need to be specified.
Windows Installer properties	Specifies an installer action.
Features to install	Installs the specified InputAccel features. For example, the following command line installs an InputAccel Server: setup.exe /s /v"/qn ADDLOCAL="ALL" SERVER_INSTANCES="1" IA_SERVICES_RUNAS_LOCAL_SYSTEM="1" /promptrestart"

Related Topics —

Supported InstallShield switches, page 151
Supported MSI switches, page 152
Supported Windows Installer properties, page 152

Command line considerations

There are some important issues to consider when installing InputAccel from a command line.

Escape characters

When creating the installation command line, some installer properties and characters must be escaped for the installation to succeed.

Any property containing a space must have escaped double-quotes. For example:

```
INSTALLDIR=\"c:\Program Files\InputAccel\Client\"
```

or

```
IA_SERVICES_RUNAS_USER_ACCT=\"CORP\My Login\"
```

Another issue to consider are characters that require “escaping” by the Windows command prompt. The ampersand (&) symbol must be escaped using a caret (^) character. For example:

```
SCANNERNAME=\"Canon DR-4580U ^& DR-5580U\"
```

Maximum length

The maximum number of characters that can be passed is 1066. If more characters are passed in, `setup.exe` launches and then quits.

Related Topics —

Supported InstallShield switches, page 151
Supported MSI switches, page 152
Supported Windows Installer properties, page 152
InputAccel installer properties and feature names, page 153
Command-line installation failures, page 133

Installing InputAccel from a command line

Use the InstallShield and Windows Installer command line arguments to create instructions to install InputAccel software:

To install InputAccel from a command line:

1. From the **Command Prompt** or **Start** > **Run**, browse to `setup.exe` in the installation program directory, which includes the **Clients**, **Databases**, **Server**, and **WebComponents** directories.
2. Type a customized installation command in one line to add, modify, repair or remove InputAccel features. For example, to install one InputAccel Server type:

   ```
   setup.exe /s /v"/qn ADDLOCAL="ALL" SERVER_INSTANCES="1" IA_SERVICES_
   RUNAS_LOCAL_SYSTEM="1" /promptrestart"
   ```

Note: You can also automatically install InputAccel features by using a batch file that contains silent installation command line instructions.

Related Topics —

Supported InstallShield switches, page 151
Supported MSI switches, page 152
Supported Windows Installer properties, page 152
InputAccel installer properties and feature names, page 153
Command-line installation failures, page 133

Automating unattended installations

You can specify multiple installation command lines in a batch file to automate an unattended installation. The following example shows three commands contained within one batch file that generate a log file:

```
//Begin contents of irr_sp1.bat batch file
//Install Service Pack 1 and write log file
setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_RUNAS_LOCAL_SYSTEM="1" /l*v
 "C:\logs\sp1_install.log""

//Remove COPY features and write a log file
setup.exe /v"/qn REMOVE=COPY /l*v "C:\logs\sp1_remove.log""

//Repair features and write log file
setup.exe /v"/qn /fvomus /l*v "C:\logs\sp1_repair.log""
//End contents of irr_sp1.bat batch file
```

- The first command line argument installs the entire InputAccel Clients directory.
- The second command line argument removes selected features of the installation.
- The third command line argument repairs the features removed by the second process.

Related Topics —

Supported InstallShield switches, page 151
Supported MSI switches, page 152
Supported Windows Installer properties, page 152
InputAccel installer properties and feature names, page 153
Command-line installation failures, page 133

Modifying unattended installations

From the directory location of the base InputAccel MSI files, you can modify unattended installations by:

- **Adding features and modules**: To add a feature or a list of features, use the **ADDLOCAL** property. For example, to add the base process (IAP) files, the command line is:

  ```
  setup.exe /v"/qn ADDLOCAL=BASE_IAP_FILES /l*v "C:\logs\modify.log""
  ```

  Refer to the examples detailed in the Supported InputAccel feature properties and names section.

- **Removing features and modules**: Use the **REMOVE** property to remove a feature or a list of features. After removing features, repair the installation. The following example removes the COPY module and creates a log file of the procedure:

  ```
  setup.exe /v"/qn REMOVE=COPY /l*v "C:\logs\remove.log""
  ```

  Use the **/x**Install Shield switch to remove the **Clients**, **Databases**, **Server**, or **WebComponents** directories. For example, from a **Command Prompt** window, navigate to the `Clients` directory on the InputAccel installation media. At the command prompt, type the following command line to remove the **Clients** directory and write a log to the specified directory:

  ```
  setup.exe /v"/qn /x /l*v "C:\logs\remove.log""
  ```

  Note: Use the Administration Console module to remove an InputAccel Server from a ScaleServer group before removing the server. Refer to the Using Administration Console section in the Administration Guide for additional information.

- **Repairing an InputAccel installation**: Use the /f MSI switch to repair an installation. The following command line example repairs the features you removed:

  ```
  setup.exe /v"/qn /fvomus /l*v "C:\logs\sp1_repair.log""
  ```

Related Topics —

Supported InstallShield switches, page 151
Supported MSI switches, page 152
Supported Windows Installer properties, page 152
InputAccel installer properties and feature names, page 153
Command-line installation failures, page 133

Manually registering a client module to run as a service

InputAccel client modules that can run as services are installed as services by default.

Client modules may need to be installed manually as services in the following circumstances:

- The client module was installed as an application during the installation process.
- The modules were uninstalled as services in order to change the login parameters.

Not all modules can be run as services. For a list of client modules that can be run as services, refer to Table 10, page 142.

To manually register a client module to run as a service:

1. Open a command window on the computer where the client module is installed.
2. In the command window, switch to the directory where the module executable files are installed. By default, this is `C:\Program Files\InputAccel\Client\binnt`. Alternatively, use full path names for each file name specified in the following commands.
3. Enter one of the following commands, according to the type of module you are configuring. This is the same command line you would enter to run the module, but with the **`-install`** argument appended:
   - Modules that are listed as "New in version 6.0" in Table 10, page 142, except custom exporters:

     **`quickmodulehost.exe -modulename:`*`modulename`*
     `-login:`*`username`*`,`*`password`*`@`*`servername`* **`-install[:`*`serviceName`*`]`

   - Export modules that are listed as "New in version 6.0" in Table 10, page 142 (including Documentum Advanced Export):

     **`quickmodulehost.exe -modulename:`*`modulename`*
     **`-login:`*`username`*`,`*`password`*`@`*`servername`*
     `-loginex[:`*`username`*`,`*`password`*`@`*`repository`*`] -install[:`*`serviceName`*`]`

   - Modules that are not listed as "New in version 6.0" in Table 10, page 142:

     ***`modulename`*`.exe -login:`*`username`*`,`*`password`*`@`*`servername`* **`-install`**

   where:

   - ***`modulename`*** is the full module name. In the case of modules that are "new in version 6.0," *modulename* includes the namespace; for example, `Emc.InputAccel.ImageDivider`. Do not include the `.dll` extension of the module namespace. In the case of Documentum Advanced Export, the full *modulename* is `DocumentumAdvancedExport`. For other modules, *modulename* is the executable name of the module; for example, `iaeximg`.
   - **`-login:`*`username`*`,`*`password`*`@`*`servername`** are the credentials to use to log into the InputAccel Server. For security reasons, we recommend that you do not specify an actual user name and password in the command line because doing so also stores these items a clear text in the registry. Instead, use the run-as account specified in the **Log On** tab of the Windows **Service Control Manager** window. To do this, specify * for the *username*,*password* argument; for example ...-login:**@*servername*... ***`servername`*** is the name of computer hosting the InputAccel Server to which the module should connect when running as a service. The topic Best practices for running modules as services, page 28 provides more information on how to configure modules to run as services.

- ***serviceName*** is the name by which the service is registered and listed in the Service Control Manger. Omit this argument to register the service using its default module name. Specifying this parameter enables you to run multiple instances of the same module, each as a separate service. Not supported for modules that are not listed as "New in version 6.0" in Table 10, page 142.
- **-loginex:*username*,*password*@*repository*** are the credentials used by a custom export module to log into a third-party repository.

Note:

- Registering a module as a service from the command line configures the module to run as a service; it does not install or run the module.
- Registering a module as a service when it is already registered overwrites its previously-registered properties with the new properties specified.
- Only modules listed as "New in version 6.0" in Table 10, page 142 support the ***serviceName*** attribute. When specified, this argument enables you to configure multiple instances of a single module to run as a service, each under its own service name. When a module is registered as a service, parameters such as a user name or account name can be specified. If the service is reregistered, the newly specified parameters, or default parameters if none are specified, overwrite existing ones. To register another instance of a client module as a service on the same computer, ensure that you run the command with a unique ***serviceName*** to avoid overwriting the previously installed service.
- To configure a module that has been registered as a service for high availability, be sure to appropriately configure the **Recovery** tab in the Windows **Service Control Manager**. The InputAccel client setup program does this automatically when it registers a module as a service; however, you must configure this option when manually registering a module as a service. To match the configuration used by the client setup program configure the following settings:
  - **First failure** list: select **Restart the Service**
  - **Second failure** list: select **Restart the Service**
  - **Subsequent failures** list: select **Restart the Service**
  - **Reset fail count after** field: Enter **1** days
  - **Restart service after** field: Enter **1** minutes

Caution: When configuring a module to run as a service, do not enable **Allow service to interact with desktop**. When a module runs as a service, it suppresses its user interface and does not run properly when configured to interact with the desktop.

Related Topics —

Chapter 3, Installation planning
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Installing the InputAccel Client Components, page 62
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Unregistering client modules that are registered as services

InputAccel client modules that are registered as services may be unregistered.

To unregister a client module that is registered as a service:

1. Open the command window on the machine where the client module is registered as a service.
2. In the command window, switch to the directory where the module executable files are installed. By default, this is `C:\Program Files\InputAccel\Client\binnt`. Alternatively, use full path names for each file name specified in the following commands.
3. Enter one of the following commands, according to the type of module you are configuring. This is the same command line you would enter to run the module, but with the **`-uninstall`** argument appended:
   - Modules that are listed as "New in version 6.0" in Table 10, page 142:

     `quickmodulehost.exe -modulename:`*`modulename`*` -uninstall[:`*`serviceName`*`]`
   - Modules that are not listed as "New in version 6.0" in Table 10, page 142:

     ***`modulename`*`.exe -uninstall`**

   where:
   - ***`modulename`*** is the full module name. In the case modules that are "New in version 6.0", *modulename* includes the namespace; for example, `Emc.InputAccel.ImageDivider`. Do not include the `.dll` extension of the module namespace. In the case of Documentum Advanced Export, the full *modulename* is `DocumentumAdvancedExport`. In the case of traditional executable modules, *modulename* is the executable name of the module; for example, `iaeximg`.
   - ***`serviceName`*** is the name by which the service was registered. Omit this argument if the service was registered under its default service name.

   After the module is unregistered as a service, it can continue to run as an application. (Exceptions: the Web Services subsystem including Web Services Coordinator, Web Services Hosting, and the Web Services Input and Web Services Output modules can only run as services, not as applications.)

Note: Uninstalling a client module that was installed as a service only unregisters the service. It does not the remove application.

Related Topics —

Chapter 3, Installation planning
Client computer considerations, page 27
Module-specific requirements, page 16
Installing the InputAccel Client Components, page 62
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Installing additional components

The InputAccel 6.0 setup program enables you to install the following additional components:

- InputAccel Reports Designer 6.0
- EMC Captiva Input Management Console

Installing InputAccel Reports Designer 6.0

The InputAccel Reports Designer 6.0 setup program installs Crystal Reports 2008. This software can be used to design custom reports to view InputAccel statistics. Each purchased InputAccel Server includes a full version of the Reports Designer, and this license key is provided by your account manager. The InputAccel setup program includes a 30-day demonstration product key. If you already own a Crystal Reports license, you can enter your own product key. By accepting the EULA, you can install only one copy of this program per licensed copy of the InputAccel Server.

To install InputAccel Reports Designer 6.0:

1. Start the InputAccel setup program from the installation media by opening the file `autorun.exe`.
2. From the **InputAccel Products** menu, select **Install Products**.
3. From the **Additional Products** menu, select **InputAccel Reports Designer 6.0**.
4. Follow the instructions in the installation wizard to complete the installation.

Installing EMC Captiva Input Management Console

EMC Captiva Input Management Console enables users to monitor the health and performance of InputAccel and other content management systems and components. The setup program comes with a 30-day trial version, unless you have a corporate key and license code for Input Management Console.

Note:

- Obtain a valid license from VSR Networks to successfully install Input Management Console.
- Refer to the Input Management Console documentation for the system requirements to install the product.

To install EMC Captiva Input Management Console:

1. Start the InputAccel setup program from the installation media. If the disc menu does not appear automatically after a few seconds, or if you are running the installation from a local disk or network share, open the file `autorun.exe` to begin.
2. From the **InputAccel Products** menu, select **Install Products**.
3. From the **Additional Products** menu, select **EMC Captiva Input Management Console**.
4. Follow the instructions in the installation wizard to complete the installation.

Note: Input Management Console requires the `IASYSMON` license within InputAccel licensing to enable Input Management Console to connect to the InputAccel Server. Contact your account manager to obtain the appropriate license.

Related Topics —

Setting up the Input Management Console in an MSCS cluster, page 81
Installing InputAccel Reports Designer 6.0, page 96

Chapter 5

Upgrading InputAccel

This section explains how to upgrade from InputAccel versions 5.2.3 and 5.3 to InputAccel 6.0.

Topics in this section include:

Upgrade planning

Upgrading InputAccel requires careful planning and execution. This section explains how to plan for an upgrade. The following section, Upgrading to InputAccel 6.0, page 119 provides specific steps to upgrade your InputAccel system.

InputAccel version 6.0 can be upgraded from the following versions:

- InputAccel 5.2.3
- InputAccel 5.3
- InputAccel 5.3.2

To upgrade from any other version, you must first upgrade to one of these versions; alternatively, perform a new installation as explained in Chapter 4, Installing InputAccel.

Upgrade planning includes the following:

- Identifying irreplaceable files to archive (Identifying irreplaceable files, page 100).
- Identifying new system requirements and obtaining new equipment as needed (Identifying new system requirements, page 105).
- Understanding the upgrade process (Understanding the upgrade process, page 105).
- Granting permissions to users so they can use the upgraded system (Permissions, page 113).
- Performing pre-production testing and acceptance (Performing pre-production testing and acceptance, page 114).
- Scheduling upgrade phases (Scheduling upgrade phases, page 114).
- Incorporating new capabilities (Incorporating new system functionality, page 115).

Identifying irreplaceable files

Certain files should be archived before you perform any upgrades. Creating an archive is important in case you:

- Need to re-implement custom index validation code after upgrading.
- Need to roll back your InputAccel system to the previous version.
- Want to preserve previously-customized processes in case you need to roll back your InputAccel installation.
- Want to preserve special patches and module customizations in case you need to roll back your InputAccel installation.

The upgrade process automatically backs up certain key files and settings on servers and client computers, but making your own offline archive is always a good idea. Make copies of the following files and data, and store them in a safe place.

Table 8. Irreplaceable InputAccel Files and Data

Data Type	Host location	Default File Location	Notes
Activation files	InputAccel Servers	`\ias\activation\*.*`	Files used by software security key activation (`.caf`) files. Retain these files in case reactivation becomes necessary. Identify each activation file according to the server from which it was archived.

Module Definition Files	Process Developer workstation(s)	`\program files\inputaccel\client\src\ipp\*.mdf\`
		
		`program files\inputaccel\client\pcf\*.mdf`
			Your developers or EMC Consulting may have customized your `.mdf` files. Retain these files for future maintenance.

Integrated ProcessFlow Project source files	Process Developer workstation(s)	`\program files\inputaccel\client\src\ipp\*.ipp`	Your developers or EMC Consulting may have created or customized your `.ipp` files. Retain these files for future maintenance.
Index validation source code and binary files	Development system and Index module workstations	`\program files\inputaccel\client\src\iaidxval\*.*`	Your developers or EMC Consulting may have created custom index validation and population code. Retain these files for future maintenance. If using customized validation code, retain the compiled `.dll` files for continued use with the Index module until you are able to implement the desired behavior with client-side scripting.
`win.ini`	Client computers	`\<windows>\win.ini`	Contains an `[InputAccel]` section for tuning module behavior. May have been customized on a client-by-client basis; therefore, identify each `win.ini` file according to the client computer from which it was archived. This file contains settings for modules that were included in previous InputAccel releases (modules that are not listed as "New in InputAccel 6.0" in Table 10, page 142).

Data Type	Host location	Default File Location	Notes
settings.ini	Client computers	Windows XP: `C:\Documents and Settings\All Users\Application Data\EMC\InputAccel\Settings.ini` Windows Vista: `C:\ProgramData\EMC\InputAccel\Settings.ini`	Contains settings for tuning module behavior. May have been customized on a client-by-client basis; therefore, identify each `settings.ini` file according to the client computer from which it was archived. This file contains settings for modules that are new as of the InputAccel version 6.0 release (modules that are listed as "New in InputAccel 6.0" in Table 10, page 142).
Batches and stage files	InputAccel Servers	`\ias\batches\*.*`	All in-process data (images, intermediate files, and other batch data). Each InputAccel Server has a unique set of batches; therefore, identify each data set according to the server from which it was archived. Be aware that there may be a large amount of data.
Processes	InputAccel Servers	`\ias\process\*.iap`	Compiled versions of `.ipp` files that are used in daily production. They are typically based on customized source files. All InputAccel Servers within a ScaleServer group should contain an identical set of processes; therefore, archiving a single server should be sufficient.
Supplemental module configuration files	InputAccel Servers	`\ias\modules\*.*`	Some client modules store shared configuration files such as templates, reference images, or other data files in this location. Check each server to determine if multiple archives are necessary.

Data Type	Host location	Default File Location	Notes
Registry parameters	InputAccel Servers	`HKEY_LOCAL_MACHINE\SYSTEM\ CurrentControlSet\Services\ InputAccel\Parameters`	You or EMC Consulting may have modified server registry values to tune performance. Check each server to determine if multiple archives are necessary.
Global server database	InputAccel Servers	`\ias\values.idx`	Contains license data, user module preferences, and process/batch security settings. This data is automatically migrated into the InputAccel Database when each InputAccel Server is upgraded; however, this file will be needed if you roll back to the earlier version. Each InputAccel Server has a unique `values.idx` file; therefore, identify each file according to the server from which it was archived.

Related Topics —

Identifying new system requirements, page 105
Understanding the upgrade process, page 105
Performing pre-production testing and acceptance, page 114
Scheduling upgrade phases, page 114
Upgrading to InputAccel 6.0, page 119

Automatic backup during upgrade

When you upgrade your InputAccel Server and client workstations to version 6.0, the setup programs automatically create backup directories containing copies of key files so that you can restore to the previous version. You should maintain these backup directories until you are certain that your updated system is functioning as expected and that there is no possibility that you will want to return to the previous version.

Location	Automatic backup directory	Contents

`c:\Program Files\InputAccel\Server`	`$InputAccelServer5.2.3$`
	`$InputAccelServer5.3.0$`
	`$InputAccelServer5.3.2$`
		Files necessary to restore the previous version of the InputAccel Server, including `values.idx` and important registry keys.

`c:\Program Files\InputAccel\Server`	`backup`	Files that were used in previous versions of InputAccel to restore a previous version of InputAccel Server files. Included for historical reasons; will be removed in the next release.

`c:\Program Files\InputAccel\Client`	`$InputAccelClient5.2.3$`
	`$InputAccelClient5.3.0$`
	`$InputAccelClient5.3.2$`
		Files necessary to restore the previous version of the InputAccel client installation as it existed on the computer prior to upgrade. Included are the contents of the `src` directory containing all process source files (.ipp) and module definition files (.mdf).

`c:\Program Files\InputAccel\Client`	`backup`	Files that were used in previous versions of InputAccel to restore a previous version of InputAccel client files. Included for historical reasons; will be removed in the next release.

Identifying new system requirements

Each InputAccel component has new system requirements. In some cases, the hardware and software hosting your current InputAccel system may not be suitable for InputAccel 6.0. For example, you need a new server to host the InputAccel Database, and you may need new servers to host the Administration Console web server, the InputAccel Remoting host, and the ClickOnce deployment host. Carefully check the information in Chapter 2, System requirements and recommendations to be sure you are upgrading on supported platforms.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Performing pre-production testing and acceptance, page 114
Scheduling upgrade phases, page 114
Incorporating new system functionality, page 115
Upgrading to InputAccel 6.0, page 119

Understanding the upgrade process

InputAccel 6.0 introduces new components and new system requirements that must be considered when creating an upgrade plan. When upgrading InputAccel, you must install the following components in this order:

1. InputAccel Database hosted by Microsoft SQL Server (InputAccel Database, page 105)
2. InputAccel Server(s) (InputAccel Server(s), page 106)
3. Administration Console web server hosted by Microsoft IIS (Administration Console, page 106)
4. New security keys, licenses, and activation files (Licenses, activation files, and security keys, page 107)
5. Backward Compatibility Pack, to continue using your existing client modules without performing a full InputAccel client installation/upgrade (InputAccel Clients, page 107)
6. Upgraded client modules (InputAccel Clients, page 107)
7. New client modules (New client modules, page 112)

InputAccel Database

Previous versions of the InputAccel Server used various file system mechanisms to store settings, values, states, log data, and other system information. InputAccel 6.0 uses a centralized database hosted by Microsoft SQL Server. With the exception of development and demonstration systems, the InputAccel Database should be installed on a dedicated server that meets or exceeds the performance criteria to keep the InputAccel system at peak production capacity. System requirements and recommendations for the InputAccel Database host system can be found in Database server requirements, page 11.

Related Topics —

Database server requirements, page 11
Installing the InputAccel Database, page 56
Database issues, page 136

InputAccel Server(s)

InputAccel Server software has been redesigned to work with the InputAccel Database, and has new system requirements. If your current InputAccel Servers are hosted by Microsoft Windows XP or Windows 2000, you must upgrade them according to the system requirements listed in InputAccel Server requirements, page 12.

If you have configured multiple InputAccel Servers as a ScaleServer group, the ScaleServer group is maintained during the upgrade procedure. You need only upgrade each InputAccel Server, and then confirm that it is configured as needed by using the Administration Console. Refer to the Using Administration Console section in the Administration Guide for details.

Note:

- You must upgrade all InputAccel Servers in the ScaleServer group at one time — you cannot mix version 6.0 and previous version InputAccel Servers in your configuration.
- When upgrading a ScaleServer group, if the setup program detects that the Windows Management Instrumentation service is running, it displays a message indicating that WMI will be stopped before proceeding. You must allow the setup program to stop WMI to upgrade a ScaleServer group. After the upgrade completes, the setup program restarts the WMI service.
- The machine name of the InputAccel Server must not be longer than 15 characters; otherwise, client computers will be unable to connect.

Caution: When upgrading a ScaleServer group that has one or more InputAccel Servers installed on the same machine as the SQL Server, you must stop all SQL Server instances and close all Service Control Manager windows before starting the upgrade.

Related Topics —

InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
Installing the InputAccel Server, page 58
ScaleServer issues, page 137

Administration Console

The Administration Console replaces the Administrator module from previous versions. Unlike the Administrator module, which is a standalone application, the Administration Console is a web application hosted by a web server. You must install the Administration Console on a web server that meets the system requirements listed in InputAccel web components and ClickOnce host requirements, page 13. Administrators access the Administration Console by using the web browser on their computer from any location that can access the hosting web server.

Note: You must use the Administration Console to ensure that you can perform all administrative tasks successfully. Although the Administrator module from previous version of InputAccel may continue to work for some administrative tasks, it does not support the new features and capabilities of InputAccel version 6.0. For example, you must use the Administration Console to define InputAccel roles and permissions.

Related Topics —

Installing the Administration Console, page 60
Administration Console host system considerations, page 24
ClickOnce host system considerations, page 25
InputAccel Remoting server considerations, page 25
Installing InputAccel Remoting, page 83

Licenses, activation files, and security keys

InputAccel version 6.0 uses the same licensing mechanism as previous versions. Your licensing mechanism may use a hardware security key (USB or parallel), or a software security key (`.caf` file). You may continue to use your hardware security key from a previous release, but must obtain and install new licenses and new activation codes after upgrading. If, as part of the upgrade process, your InputAccel Server is added to a new domain, you must obtain a new activation code.

The process for activating InputAccel Servers is provided in the Using Administration Console section of the Administration Guide.

Note: You must use a software security key (`.caf` file) if you are performing a side-by-side installation of multiple InputAccel Servers on a single computer. Hardware security keys are incompatible with side-by-side installations.

Related Topics —

ScaleServer licensing, page 45
Licensing for use in a Microsoft cluster, page 45
Licensing for disaster recovery, page 46

InputAccel Clients

InputAccel version 6.0 includes most of the client modules from previous releases, updated to work with the new system architecture. If you are not ready to upgrade all of your client modules, or if you are using custom modules that were designed for a previous version, you can continue to use version 5.2.3 and 5.3 client modules by installing the Backward Compatibility Pack on each client workstation. The Backward Compatibility Pack installs the necessary foundation and client software to communicate with the new InputAccel Database and InputAccel Server. You then can upgrade to the version 6.0 client modules at any later time. The upgrade process works regardless of whether or not you have installed the Backward Compatibility Pack.

InputAccel version 6.0 also provides new client modules and replacements for some of the client modules from previous releases. The following table lists modules that require special upgrade considerations.

Table 9. Client module upgrade issues

Module	Upgrade issue
Dispatcher for InputAccel version 5.0	Dispatcher for InputAccel version 5.0 is not compatible with InputAccel version 6.0.
Dispatcher for InputAccel version 5.0 upgrades to Dispatcher for InputAccel version 6.0	After the upgrade completes, only the new modules reside on the computer. The Dispatcher project file (DPP) is automatically upgraded to the new version (when you open it for the first time in the new version) and is no longer supported by the earlier version. For this reason, you cannot continue to use workstations from an earlier version with workstations upgraded to the new version. (You must upgrade all your Dispatcher for InputAccel workstations at the same time.)
Documentum Server Export upgrades to Documentum Advanced Export	After the upgrade completes, only the new module resides on the computer. The new module has the same Module ID as the module it replaces. The same `.mdf` file, processes, and batches can be used. To use new features and new IA Values in the module, use Process Developer to open the `.ipp` file, change the included `.mdf`, and then recompile and reinstall the modified process. You must then set up the module steps in the resulting processes and batches. The new module has different options for handling errors. When the InputAccel Server starts up for the first time, it upgrades all batches that contain steps of Documentum Server Export to use the an appropriate new option. In particular: • The options **Continue current task and keep accepting tasks** and **Continue current task, then stop accepting tasks** are both changed to **Automatically abort entire task**.

Module	Upgrade issue
Index upgrades to IndexPlus	After the upgrade completes, both the Index and IndexPlus modules reside on the workstation. Continue to use the older module while preparing to use the new module. Preparing to use the new module requires that you: • Obtain and install a license for the IndexPlus module. • Revise your processes (`.ipp` files) to include the new module and its `.mdf` file. • Check and update the IA Values you are using in your processes to match the IA Values declared in the new module's `.mdf` file. • Compile and install the new processes, and then set up IndexPlus module steps as required, redefining your index fields, index zones, and other configuration details. • Write client-side script code to handle any custom behaviors desired, including validation and population functionality that may have been implemented with the Index module by using one of the validation `.dll` files. If preferred, you can continue to use the standard validation methods in `iaidxv32.dll` from previous versions by using the included client-side script, `LegacyValidation` to call them; however, you cannot use a customized version of `iaidxv32.dll`. **Note:** InputAccel no longer includes the source code for the validation library, `iaidxv32.dll`. If you have used the source code provided in a previous release to customize validation and population behavior, you can continue to use it only by continuing to use the Index module from the corresponding previous release.
PrimeOCR upgrades to PrimeOCR Plus	After the upgrade completes, only the new module resides on the computer. The new module has the same Module ID as the module it replaces. The same `.mdf` file, processes, and batches can be used. To use new features and new IA Values in the module, use Process Developer to open the `.ipp` file, change the included `.mdf`, and then recompile and reinstall the modified process. You then must set up the module steps in the resulting processes and batches.

Module	Upgrade issue
Scan upgrades to ScanPlus Rescan upgrades to RescanPlus	After the upgrade completes, both the Scan and ScanPlus modules (or Rescan and RescanPlus modules) reside on the workstation. Continue to use the old module while preparing to use the new module. Preparing to use the new module requires that you: • Obtain and install a license for the ScanPlus and RescanPlus modules. • Revise your processes (`.ipp` files) to include the new module and its `.mdf` file. • Check and update the IA Values you are using in your processes to match the IA Values declared in the new module's `.mdf` file. • Compile and install the new processes, and then set up ScanPlus/RescanPlus module steps as required for each process. • Write client-side script code to handle any custom behaviors desired, including those that may have been implemented with Scan Callback functionality in the Scan module. Consider installing a new version of your scanner driver by running the main setup program and selecting **Add a Scanner Driver**.
ScanSoft OCR upgrades to NuanceOCR	After the upgrade completes, only the new module resides on the computer. The new module has the same Module ID as the module it replaces. The same `.mdf` file, processes, and batches can be used. To use new features and new IA Values in the module, use Process Developer to open the `.ipp` file, change the included `.mdf`, and then recompile and reinstall the modified process. You then must set up the module steps in the resulting processes and batches.
Documentum Server Export Excel Graphing IBM Content Manager Export iManage WorkSite Server Export	These modules are not included with InputAccel version 6.0. If you installed these modules from an earlier release, you may continue to use them by upgrading the client workstation components of the computer on which they are installed. You may do this either by running the client setup program or by installing the Backward Compatibility Pack. Either of these options performs the necessary client upgrade procedure.
Automatic Quality Assurance	This module is not installed with InputAccel version 6.0 and is no longer supported.

Module	Upgrade issue
Custom modules and process code	InputAccel Server version 6.0 handles IA Values in a way that is, in certain specific cases, incompatible with previous versions. The specific cases have to do with changes made for Unicode compatibility and affects the way binary values are interpreted. During an upgrade, the InputAccel Server automatically reconfigures existing batches for EMC-branded modules. It does this when it initially starts after the upgrade is complete. It can do this because it has a list of all binary IA Values used by all EMC-branded modules. The automated upgrade process correctly upgrades batches that use only EMC-branded modules. However, processes and custom modules present three potential issues: • *Batches* that were created in a previous release and use custom modules may fail when you attempt to complete them after upgrading, if those custom modules read or write binary IA Values. You must complete and clear all such batches prior to upgrading. • *Processes* that use such a custom module are not automatically converted by the InputAccel Server during an upgrade. Process code should be reviewed to ensure that is does incorrectly copy a binary IA value to another IA Value. • *Custom modules* may not handle binary values correctly according to the requirements of InputAccel 6.0. These modules should be reviewed to ensure that they follow proper data handling rules: always use `IAValueGetBinary( )` to read values that are written by `IAValueSetBinary( )` and always use `IAValueGetAscii( )` to read values that are written by `IAValueSetAscii( )`.

Table 10, page 142, identifies key characteristics of each InputAccel module, including whether it runs in attended mode and unattended mode, whether it is ScaleServer compatible, whether it can run as a service, and whether it features a client-side scripting interface.

Related Topics —

Client workstation requirements, page 15
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Upgrading client modules, page 123

New client modules

After upgrading your existing client workstations, you may want to install new client modules. These modules may be installed on existing client computers or on new computers. To install a module on an existing client computer, you must run the client setup program and choose the **Modify** option, then select the module(s) to install. Before you can choose the **Modify** option, you must complete the version 6.0 upgrade. The upgrade process proceeds automatically when the client setup program determines that the installed version is older than the current version.

InputAccel version 6.0 includes the following new modules that are not automatically installed as part of the upgrade process:

- Web Services Input: Imports images and data from third-party data providers using web services interconnectivity standards. Refer to the Web Services Guide for more information.
- Web Services Output: Exports images and data from InputAccel to third party data consumers using web services interconnectivity standards. Refer to the Web Services Guide for more information.
- Email Import: Imports images and data from email and email attachments into an InputAccel system. Refer to the Email Import Guide for more information.
- Image Divider: Splits files containing multi-page images into separate single-page files. Refer to the Email Import Guide for more information.
- Script Engine: Runs client-sides scripts between other module steps. Refer to the Client Script Engine Guide for more information.
- Multi-Directory Watch: Watches specified directories for new files, and then automatically creates batches and imports the files.

Note: When you install new client modules on a computer that has the Backward Compatibility Pack installed, the client setup program detects and removes the Backward Compatibility Pack before upgrading existing components to version 6.0. When this process completes, the client components on the computer have been updated. If you want to install additional components, run the client setup program again. Doing so displays the **Program Maintenance** window where you can modify, repair, or delete your installation. Choose **Modify** to select new client modules to install.

Related Topics —

Client workstation requirements, page 15
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Permissions

New in InputAccel version 6.0, only users who have been granted the proper permissions can access InputAccel or any of its modules. For configuration purposes, the IIS Machine Administrator group for the computer hosting the Administration Console is granted all InputAccel permissions. All other users must be explicitly granted permissions before they can use the system. A user belonging to the IIS Machine Administrator group should first create an InputAccel Administrator role and grant all permissions to that role, and then add at least one person — the designated InputAccel administrator — to that role.

Caution: After designating at least one InputAccel Administrator, you should deactivate the IIS Machine Administrator group to protect this InputAccel from unauthorized use. Otherwise, any user who logs into this computer has unrestricted access to your InputAccel system.

Note: Permissions for sample processes are overwritten when upgrading the InputAccel Server. When the upgrade installs new sample processes with the same file names as sample processes from previous versions, the new version resets process permissions to their default values (Read/Write permission assigned to the group "Everyone"). Use the Administration Console to assign new ACLs to processes. For instructions, refer to the Using Administration Console section of the Administration Guide,

The InputAccel administrator should then define additional user roles (and possibly additional Administrator roles) and assign appropriate users to each of those roles. The minimum InputAccel permissions needed to run a module in production mode include:

- Server.Login
- Server.Read.Module.Data
- Server.Write.Module.Data
- System.BatchRead
- System.BatchModify
- System.ProcessRead

Some modules require additional permissions to function, and certain specific tasks (other than processing batches) require their own permissions. Refer to the Using Administration Console section of the Administration Guide for more information about permissions and user roles.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Security, page 31
Scheduling upgrade phases, page 114
Incorporating new system functionality, page 115
Upgrading to InputAccel 6.0, page 119

Performing pre-production testing and acceptance

If possible, upgrade your InputAccel test environment first. Follow all the recommended upgrade steps. Install new functionality as needed. Integrate replacement modules, such as ScanPlus and IndexPlus, and update their processes, settings, and custom behaviors. Then run acceptance tests using typical documents.

Proceed to the next step in the plan only when you achieve the expected results from the test upgrade.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Upgrading to InputAccel 6.0, page 119

Scheduling upgrade phases

After completing upgrade testing and acceptance, carefully schedule each phase of your production system upgrade. Consider each of the following recommendations:

- Determine which components you will upgrade in each phase. Keep in mind that you must install the InputAccel Database, upgrade all InputAccel Servers, install the Administration Console, and install the Backward Compatibility Pack on each client computer that you do not intend to immediately upgrade. After you have completed these phases, upgrade client computers one at a time as convenient.

  Note: The Backward Compatibility Pack can be installed remotely by using a "push" installation with the command-line options described in Installing the Backward Compatibility Pack from a command line, page 177.
- Locate all installation media for your current InputAccel system prior to beginning the upgrade. You will need these items if unexpected upgrade issues require you to roll back your upgrade to the previous version.
- Choose the best day of the week to upgrade, so that you can take advantage of both production and non-production time.

  For example, if your production normally operates five days per week, consider upgrading the night before the last production day of the week. You then will have a full day of production load followed by two days of non-production, allowing time to resolve any issues.
- Shut down InputAccel immediately before the upgrade and make a backup copy of the `\IAS` directory tree. This creates a snapshot of the system state immediately before you upgrade.
- If you encounter major issues during your upgrade, contact EMC Support before you decide to abort the upgrade process.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Incorporating new system functionality, page 115
Upgrading to InputAccel 6.0, page 119

Incorporating new system functionality

InputAccel version 6.0 includes new system functionality that you may want to use after upgrading your system. This new functionality includes:

- IndexPlus index families: Consider consolidating your existing processes by using index families to display different sets of index fields based on the type of document. If you are currently maintaining multiple processes only to accommodate different sets of index fields, you can now combine those processes into one. For more information, refer to the IndexPlus Guide.
- ClickOnce deployment of ScanPlus, RescanPlus, and IndexPlus: Prepare a ClickOnce deployment package for each module and install it on a file share or web server as explained in Deploying modules with the ClickOnce Deployment Utility, page 84.
- InputAccel Remoting, enabling remote modules to connect through the Internet to a proxy server: Set up the InputAccel Remoting server as explained in Installing the Administration Console, page 60.
- Client-side scripting: Several modules now have client-side scripting capabilities, and the new Script Engine module can be included in a process specifically to run scripts between other module steps. Scripts can be triggered by module or by task events, and in the case of the IndexPlus module, by field events (enabling validation and population functionality). For more information, refer to the Client Scripting Guide, and the Understanding Client-side Scripting section and the Programming Reference section in each module's documentation.
- Web Services subsystem: Web Services components are installed as part of the client setup. Before the Web Services Input module can be used, the Web Services Coordinator and Web Services Hosting services must be started and must be configured in the **Web Services** window of the Administration Console. Refer to the Using Administration Console section of the Administration Guide for instructions.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Scheduling upgrade phases, page 114
Upgrading to InputAccel 6.0, page 119

Sample upgrade scenarios

Upgrading InputAccel requires thoughtful planning and careful execution. This section provides upgrade scenarios for typical situations to help you understand the considerations unique to your environment.

- Simple upgrade, page 116
- Upgrade while using modules from the previous version, page 117

Simple upgrade

This scenario is a straightforward upgrade from InputAccel version 5.3 to InputAccel version 6.0 with the following characteristics:

- One or more InputAccel Servers.
- One or more Scan workstations and one or more Index workstations.
- No custom modules and no special customizations by the customer or EMC Consulting.
- No use of modules from the previous version of InputAccel. Only new modules are used after upgrading.
- The following modules are not used:
  - Watch
  - Excel Graphing
  - Automatic Quality Assurance
  - IBM Content Manager Export
  - iManage WorkSite Server Export
  - Administrator Module
  - Supervisor Module
- No new functionality is used (such as Script Engine, Web Services, ClickOnce deployment, or InputAccel Remoting).

To upgrade this InputAccel system:

1. Archive irreplaceable system files in the even that you need to roll back to version 5.3. Refer to Identifying irreplaceable files, page 100.
2. Install the InputAccel Database on a new server. Refer to Installing the InputAccel Database, page 56.
3. Disconnect all client modules and stop all InputAccel Servers.
4. Run the InputAccel Server setup program on each server to automatically upgrade this component. When finished, make sure the InputAccel Server service is started. Refer to Upgrading the InputAccel Server, page 120.
5. Install the Administration Console and then install your new license codes and, if applicable, activate the product. Refer to Installing the Administration Console, page 60.
6. Run the InputAccel Client setup program on each client computer to automatically upgrade the installed components. Be sure to include the computer(s) on which you run Process Developer. Refer to Upgrading client modules, page 123.

   Note the following:

   - When you upgrade your Scan and Rescan workstations, the setup program installs the ScanPlus and RescanPlus modules, leaving the Scan module or Rescan module from the previous version in place. If needed, you can continue to use the Scan or Rescan module until you are ready to upgrade your processes. You must upgrade your processes and set up the ScanPlus and RescanPlus module steps before using the new modules. In addition, any custom Scan Callback functionality must be re-implemented by using client-side scripting.

- When you upgrade your Index workstations, the setup program installs the IndexPlus module, leaving the Index module from the previous version in place. If needed, you can continue to use the Index module until you are ready to upgrade your processes and workflow. You must upgrade your processes and set up the IndexPlus module steps (including all index fields, index zones, default values, and population and validation behavior) before using the new module.
- When you upgrade your other client computers, a new version of the module is installed. Although the new version of the module may have additional capabilities, it continues to function without changes in your current processes and batches. This is true even though some of the modules have new names:
  - Documentum Server Export is updated to Documentum Advanced Export
  - PrimeOCR for InputAccel is updated to PrimeOCR Plus for InputAccel
  - ScanSoft OCR is updated to NuanceOCR

As you begin production with the upgraded system, consider using the Scan and Index modules from the previous version. As time allows, upgrade your processes to use the new ScanPlus and IndexPlus modules and the new features of PrimeOCR Plus, NuanceOCR, and Documentum Advanced Export. Also consider consolidating your processes by using the new index families feature of IndexPlus.

Using the new modules to their full potential requires upgrading your process source files (IPPs) to include the new module executables and corresponding Module Definition Files (MDFs), compiling and reinstalling the resulting production processes (IAPs) on your InputAccel Server, and then setting up each module step appropriately. For detailed instructions, refer to the Process Developer Guide and to the Designing section in each module's guide.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Scheduling upgrade phases, page 114
Upgrading to InputAccel 6.0, page 119

Upgrade while using modules from the previous version

This scenario upgrades from InputAccel version 5.3 to InputAccel version 6.0 while continuing to use modules from the previous version. This scenario is similar to the previous scenario, but has the following additional characteristics:

- Existing functionality is needed from any or all of the following modules from the previous version:
  - Excel Graphing
  - Automatic Quality Assurance
  - IBM Content Manager Export
  - iManage WorkSite Server Export

- New functionality is needed from any or all of the following new components:
  - ClickOnce deployment
  - InputAccel Remoting
  - Web Services
  - Script Engine

To upgrade this InputAccel system:

1. Perform steps 1-5 in the previous procedure.
2. For each client computer where you want to continue to use modules from the previous InputAccel version, run the main InputAccel setup program, and select **InputAccel 6.0 Backward Compatibility Pack**. Refer to Using client modules from the previous version with the new architecture, page 122.

   Note: If you want to install new modules and retain modules from a previous release on the same client computer, you may do so with certain exceptions. To configure a computer in this way, do not install the Backward Compatibility Pack. Instead, upgrade the computer using the client setup program. This installs the necessary components to enable the old module to function within the new InputAccel system and also upgrades any modules that are already installed with their new versions, if applicable.

   When detected by the client setup program, the modules listed in the following table are automatically replaced with the corresponding updated modules. Each of the new modules continues to function in your existing processes and batches in the same manner as the old module. However, each of these modules has new features that can only be used if you update your processes to include the new Module Definition File (.mdf), and then recompile and reinstall the processes.

   - If the client setup program detects the Documentum Server Export module, it replaces it with the Documentum Advanced Export module. However, the new module continues to function in place of the Documentum Server Export module using your existing processes and setup.
   - If the client setup program detects the PrimeOCR module, it replaces it with the PrimeOCR Plus module. However, the new module continues to function using your existing processes and setup.
   - If the client setup program detects the ScanSoft OCR module, it replaces it with the NuanceOCR module. The new module continues to function in place of ScanSoft OCR using your existing processes and setup.

Detected module	Replaced with
Documentum Server Export	Documentum Advanced Export
PrimeOCR	PrimeOCR Plus
ScanSoft OCR	NuanceOCR

3. For each client computer you want to upgrade to the new modules, run the client setup program to automatically upgrade the installed components. Be sure to include the computer(s) on which you run Process Developer. Refer to Upgrading client modules, page 123.
4. To install new functionality on an existing client computer, run the client setup program again (after upgrading) to display the **Program Maintenance** window. Then select the **Modify** option

and click **Next**. In the **Custom Setup** window, select the components to install. Refer to Modifying an InputAccel installation, page 129.

5. To install new functionality on an existing client computer, run the client setup program. Choose Modify, then click **Next** to display the **Custom Setup** window and select the components to install. Refer to Installing the InputAccel Client Components, page 62.
6. For new non-client functionality (such as ClickOnce deployment and InputAccel Remoting), refer to the appropriate section of this guide for installation instructions.
7. Edit or create new processes to use the new client functionality you have added, and then compile and install them on your InputAccel Servers. Refer to the Process Developer Guide for detailed instructions.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Scheduling upgrade phases, page 114
Upgrading to InputAccel 6.0, page 119

Upgrading to InputAccel 6.0

The InputAccel Server and InputAccel client modules from version 5.2.3 onwards can be upgraded InputAccel 6.0. The upgrade only affects the existing features that are installed on the user's computer. New features that are part of the InputAccel 6.0 release must be installed separately.

Note: Uninstalling the upgraded package removes InputAccel entirely from the system and does not restore to the earlier version of the product.

To upgrade to InputAccel 6.0:

1. Complete and clear all batches that are in process. This is especially important for batches that use custom modules if those custom modules read or write binary IA Values. You must complete and clear all such batches prior to upgrading.
2. Archive irreplaceable files and data. Refer to Identifying irreplaceable files, page 100 for a detailed list of the files and data that must be archived.
3. Install the InputAccel Database. Refer to Installing the InputAccel Database, page 56 for instructions.
4. Upgrade the InputAccel Server. Refer to Upgrading the InputAccel Server, page 120 for instructions.
5. Install the Administration Console web component. Refer to Installing the Administration Console, page 60 for instructions.

6. Upgrade the client modules. Choose from the following options:
   - Install the Backward Compatibility Pack on client workstations to use the current installed versions of InputAccel client modules with the upgraded architecture. Refer to Using client modules from the previous version with the new architecture, page 122 for instructions.
   - Upgrade currently installed versions of InputAccel client modules. Refer to Upgrading client modules, page 123 for instructions.

   These steps upgrade the previous installation of InputAccel to the latest version. The following steps add new functionality and ensure that all customizations made to the previous version of InputAccel are carried over to the upgraded version.
7. Modify the installation to install additional client modules. To install additional functionality, the client components installed on the computer must first be upgraded to InputAccel 6.0 client modules. Refer to Installing new functionality, page 124 for instructions.
8. Assign permissions to users of the upgraded modules or new modules. Refer to Assigning InputAccel permissions, page 125 for instructions.
9. Upgrade existing processes and customizations. This step applies to modules that are replaced as part of the upgrade. Refer to Upgrading existing processes and customizations, page 125 for a list of modules that are replaced and the steps involved in upgrading existing processes.
10. Upgrade the Audit Extensions package. Refer to Upgrading Audit Extensions, page 126 for instructions.
11. (Only if the Scan module is upgraded to ScanPlus or the Rescan module is upgraded to RescanPlus): Use the client scripting functionality in ScanPlus or RescanPlus to upgrade the custom Scan Callback functionality. Refer to Upgrading custom Scan Callback functionality, page 126 for further details.
12. (Only if the Index module is upgraded to IndexPlus): Upgrade the IndexValidation DLL to implement Legacy Validation functionality. Refer to Upgrading Index validation functionality, page 127 for additional details.

Upgrading the InputAccel Server

Upgrading the InputAccel Server involves replacing current versions of the InputAccel Server(s) in the system with the new version.

To upgrade the InputAccel Server:

1. Install the InputAccel Database before upgrading the InputAccel Server.
2. Make sure the computer meets the InputAccel Server requirements as outlined in Chapter 2, System requirements and recommendations.
3. Record the version numbers of the InputAccel Servers in the system. The version number is displayed in the **Properties** window of the InputAccel Server executable. The version number may be needed if the server upgrade is to be rolled back.
4. Disconnect all client modules. Use the Administrator or Supervisor module to view the **InputAccel Server Connection** list and then disconnect all client modules.

5. Stop the InputAccel Servers running in the system. If the InputAccel Server is running as a service, then stop the service.
6. Install the new InputAccel Server(s). Refer to Installing the InputAccel Server, page 58 for instructions.

   Note:

   - During the InputAccel Server upgrade process, data from the `values.idx` file is migrated to the InputAccel Database. At the end of the migration, the database contains all of the relevant data and the `values.idx` file is no longer used for these configuration settings.
   - The services file is no longer used to store the TCP/IP port location for the InputAccel Server. When upgrading the InputAccel Server, the services file is parsed to locate the TCP/IP port used for the previous version of the InputAccel Server, and if found, the port is updated.
7. Activate the InputAccel Server and install new license codes.

Related topics —

InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
Installing the InputAccel Server, page 58
ScaleServer issues, page 137

Rolling back to a previously installed version of the InputAccel Server

In some situations, you may want to remove an upgraded InputAccel Server and revert to a previously installed version of InputAccel Server. This involves completely removing the InputAccel Server and all previous versions from the system while leaving the InputAccel files and data intact and then reinstalling the earlier version.

To roll back to a previously installed version of the InputAccel Server:

1. Remove the InputAccel Server from a ScaleServer group.
2. Ensure client modules are compatible with the earlier InputAccel Server. If you have upgraded the InputAccel client modules, then roll back these client modules to versions that are compatible with the earlier InputAccel Server.
3. Stop the InputAccel Server.
4. Uninstall the latest InputAccel Server.
5. Uninstall remaining InputAccel Servers from earlier installations.
6. Reinstall the earlier InputAccel Server version as well as patches and service packs.
7. The Server setup program creates a backup directory named `$InputAccelServer<previous_version>$` inside the current installation directory. Copy the `Server` directory from the backup directory.
8. Restore original registry settings. A `InputAccelServerRegistryBackup_<current_date>.reg`file is created to back up the registry values in the backup directory where `<current_date>` is the actual date of the upgrade. Double-click the REG file to restore original settings.

Note:

- There may be multiple copies of this file if you have installed InputAccel Server more than once. Ensure you select the correct one.
- Use `REGEDIT.EXE` to restore the InputAccel Server registry parameters to the indicated value. Find these registry keys in `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\InputAccel\Parameters`.

9. Restart the InputAccel Server.

Related Topics —

Upgrading the InputAccel Server, page 120
InputAccel Server considerations, page 24
InputAccel Server scalability, page 29
Installing the InputAccel Server, page 58
ScaleServer issues, page 137

Using client modules from the previous version with the new architecture

You can continue to use the existing version 5.2.3 and 5.3.0 client modules, processes, batches, values, and customizations with the new InputAccel Server and InputAccel Database, but only if you install the Backward Compatibility Pack. Do not install the Backward Compatibility Pack if you do not plan to continue using modules from your existing installation.

Caution: Client modules on the system where you run the Backward Compatibility Pack are no longer compatible with the previous version of the InputAccel Server. Uninstalling the Backward Compatibility Pack restores the client modules to their previous state and can be used with the previous version of the InputAccel Server.

To install the Backward Compatibility Pack:

1. On each client workstation that will run modules from the existing InputAccel installation (version 5.2.3 or 5.3.0), log in as a user with administrative rights.
2. Stop all InputAccel modules that are running, including any modules running as services.
3. From the InputAccel 6.0 setup program, select **InputAccel 6.0 Backward Compatibility Pack** under **Additional Products**.

   The existing version of client modules on the system where you run the Backward Compatibility Pack will now work with the InputAccel Server 6.0.

Related Topics —

Client workstation requirements, page 15
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Upgrading client modules

You can upgrade to the latest version of InputAccel 6.0 client modules at any time after you have upgraded the InputAccel Server.

To upgrade InputAccel 6.0 client modules:

1. Log in as a user with administrative rights.
2. Make sure the InputAccel Database is installed and the InputAccel Server is upgraded to the latest version.
3. Stop all InputAccel software (server and client software) running on the computer you are upgrading.
4. From the **Installation Choices** menu of the InputAccel 6.0 setup program, select **Step 3 – Install the InputAccel Client Components**.
5. A message displays, verifying that the client components installed on the computer must be upgraded to the latest version. Click **Yes** to upgrade.
6. Upgrade client modules using Step 10 - Step 17 of the Installing the InputAccel Client Components, page 62.

Related Topics —

Client workstation requirements, page 15
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Rolling back to a previous InputAccel Client version

Rolling back to a previous InputAccel client version removes the latest installation of the InputAccel client modules and reverts to a previously installed version of the InputAccel client modules.

To roll back to a previously installed client version:

1. Stop and close all InputAccel client modules that are running on the workstation you are upgrading.
2. Back up InputAccel client data.
3. Uninstall the InputAccel client modules.
4. Reinstall earlier InputAccel client software, patches, and service packs.

Related Topics —

Client workstation requirements, page 15
Client computer considerations, page 27
Client scalability, page 30
Module-specific requirements, page 16
Upgrading client modules, page 123
Appendix A, InputAccel client modules

Installing new functionality

After performing an upgrade, run the installer again to install new functionality.

To install new functionality:

1. Run the InputAccel 6.0 setup program and select **Install Products**.
2. Select the InputAccel component to install and then click **Next**. The **Program Maintenance** window displays.
3. Select the **Modify** option and then click **Next**. The **Custom Setup** window displays. The left pane of the window displays the features of the component selected. Expand the feature to view its sub-features.
4. Click the down arrow situated next to the feature name and select from the options displayed to install additional functionality and then click **Next**, **Next**, and then **Install**.

   New functionality is now installed.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Security, page 31
Scheduling upgrade phases, page 114
Incorporating new system functionality, page 115
Upgrading to InputAccel 6.0, page 119
Permissions, page 113

Assigning InputAccel permissions

After installing the Administration Console and upgrading client modules, permissions must be assigned to enable users to run the modules.

To assign InputAccel permissions, refer to the Using Administration Console section of the Administrators Guide.

Note: To initially assign permissions, you must be a member of the Administrators group on the Administration Console host computer. Use the Administration Console to create a new InputAccel Administrators role and then add the user designated as the InputAccel administrator to this InputAccel Administrators role. The InputAccel administrator can then create additional roles, each with appropriate user permissions, and assign users to those roles.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105
Security, page 31
Permissions, page 113

Upgrading existing processes and customizations

After you have upgraded the client modules, you must upgrade existing processes and customizations for replaced modules. Replaced client modules include:

- Replaced modules that require processes and customizations to be upgraded
  - — ScanPlus (replaces Scan)
  - — RescanPlus (replaces Rescan)
  - — IndexPlus (replaces Index)
- Replaced modules for which upgrading processes and customizations is recommended
  - — PrimeOCR Plus for InputAccel (replaces PrimeOCR for InputAccel)
  - — NuanceOCR (replaces ScanSoft OCR)
  - — Documentum Advanced Export (replaces Documentum Server Export)

To upgrade existing processes and customizations

1. Open the IPP process file in Process Developer.
2. Include the new MDF file.
3. (Only for ScanPlus, RescanPlus, and IndexPlus modules): Rewrite the IPP to include the new executable names.
4. Recompile and reinstall the IPPs using Process Developer.
5. Run these modules in setup mode. Refer to the module specific Guide for information on running the module in setup mode.

Related Topics —

Identifying irreplaceable files, page 100
Understanding the upgrade process, page 105

Upgrading Audit Extensions

Audit Extensions are still supported, but no longer installed for this release. The InputAccel Server now logs data to the InputAccel Database. InputAccel also includes new reporting and logging functionality which can be configured through Administration Console.

To upgrade audit extensions:

1. Navigate to the `InputAccel\client\binnt` directory.
2. Double-click `dalconfig.exe` to run the utility for database settings.
3. Select **Legacy Audit Database** from **Data Source ID**.
4. In the **Data Source (Server)** field, enter the computer name of the computer that hosts the SQL database from the previous version of InputAccel.
5. In the **Catalog** field, enter the name of the database from the previous version of InputAccel.
6. Enter the **User** and **Password** credentials to connect to the database from the previous version.
7. Click **Test Connection** to test the connection to the previous connection and then click **Done**.

Related Topics —

Database server requirements, page 11
Installing the InputAccel Database, page 56
Database issues, page 136
Appendix C, Running the Create Database Utility

Upgrading custom Scan Callback functionality

The ScanPlus and RescanPlus modules do not support the Scan Callback DLL functionality. So, if you upgraded to the new ScanPlus or RescanPlus module and you had custom functionality implemented using the Scan Callback DLL, you must use ScanPlus and RescanPlus client-side scripting to implement custom functionality. Refer to the Client Scripting Guide and the Programming Reference section of the ScanPlus Guide and the RescanPlus Guide for further information on using and implementing client-side scripts.

Related Topics —

Upgrading client modules, page 123
Appendix A, InputAccel client modules

Upgrading Index validation functionality

The IndexPlus module does not directly support the Index Validation DLL functionality that you may have used with the Index module. So, if you upgraded to the new IndexPlus module, and you had validation and population functionality implemented using the Index Validation DLL, you must use IndexPlus client-side scripting to implement similar functionality. A sample script, `LegacyValidation` available in `client\src\scripts\samples\IndexPlus\LegacyValidation.dll` and included with the IndexPlus module, enables you to continue using the Index Validation DLL by mapping field events in IndexPlus to the functions in the Index Validation DLL.

Note: InputAccel no longer includes the source code for the validation library, `iaidxv32.dll`. If you have used the source code provided in a previous release to customize validation and population behavior, you can continue to use it only by continuing to use the Index module from the corresponding previous release.

Refer to the Client Scripting Guide and the Programming Reference sections of the IndexPlus Guide for further information on using and implementing client-side scripts.

Related Topics —

Upgrading client modules, page 123
Appendix A, InputAccel client modules

Chapter 6

Modifying, repairing, and uninstalling InputAccel

An InputAccel 6.0 installation can be modified, repaired, or uninstalled. Topics in this section include:

Modifying an InputAccel installation

The current installation of InputAccel 6.0 can be modified. Modifying the installation lets you install features that are not currently installed and remove features that were installed.

To modify an InputAccel installation:

1. Stop the InputAccel component that you want to modify. For instance, stop the InputAccel Server or the client module that you want to modify.
2. Run the InputAccel 6.0 setup program and select **Install Products**.
3. Select the InputAccel component to modify and then click **Next**. The **Program Maintenance** window displays.
4. Select the **Modify** option and then click **Next**. The **Custom Setup** window displays. The left pane of the window displays the features of the component selected. Expand the feature to view its sub-features.
5. Click the down arrow situated before the feature name and select from the options displayed to modify the installation of the selected feature and then click **Next**, **Next**, and then **Install**.

   The InputAccel installation is modified.

Repairing an InputAccel installation

The InputAccel installation can be repaired. The InputAccel installation repair functionality is useful if you have removed a feature or if the program becomes corrupted; for example, by accidentally deleting a critical file.

To repair the InputAccel Server after removing a feature, you must use the same `InputAccel Server.msi` file you used to install the original server. To repair an InputAccel Clientinstallation after removing selected modules or an entire service pack you must use the same `InputAccel Client.msi` file you used to install the original system.

To repair InputAccel installations:

1. Stop the InputAccel component that you want to repair. For instance, stop the InputAccel Server or the client module that you want to repair.
2. Run the InputAccel setup program and select **Install Products**.
3. Select the InputAccel component to repair and then click **Next**. The **Program Maintenance** window displays.
4. Select the **Repair** option and then click **Next**. The **Ready to Repair the Program** window displays. Click **Install**.

Removing an InputAccel installation

Installed InputAccel components can be removed. When you remove a component, the entire component is removed from the computer. For instance, removing the client installation removes all the client modules installed on the computer.

Note: Some files may be used by applications other than InputAccel; these files are automatically removed from your system. This behavior is normal for shared files and should cause no problems to InputAccel or to other installed applications.

To remove InputAccel installations:

1. Stop the InputAccel component that you want to remove. For instance, stop the InputAccel Server or the client module that you want to remove.
2. Run the InputAccel 6.0 setup program and select **Install Products**.
3. Select the InputAccel component to repair and then click **Next**. The **Program Maintenance** window displays.
4. Select the **Remove** option and then click **Next**. The **Remove the Program** window displays. Click **Remove**.

Note: If you are uninstalling client modules that are running as services, then you must stop those services before you can continue.

Chapter 7

Troubleshooting

This section provides information to help you troubleshoot installation problems. Topics in this section include:

Installation failures

When an InputAccel component fails to install correctly, the setup program performs a rollback operation and returns the computer to the state it was in prior to starting the installation. Troubleshooting this type of installation issue requires examination of setup program log files. However, setup program log files are not generated by default. To generate a log file, you must enable logging when starting the setup program by including a command-line parameter of **`/l`**.

For example, you could start the client setup program (or any of the other setup programs) by typing the following in a command prompt window:

`setup.exe /v"/l*v `*`logfilename`*`"`

where

`/v` passes the part of the command line enclosed in quotes to the Microsoft installer package.

`/l*v` enables verbose logging.

`logfilename` is the path and file name to which to write the log data.

This command line starts the setup program and writes detailed information to the specified file. After the installation completes (or fails and rolls back), you can examine the log file to help determine the cause of the problem.

Note: Wait until the setup program closes before opening the log file to ensure that all log entries have been written to the file.

A log file created in this manner is a simple text file that can be opened with any text editor. The log file can become quite large (20 MB or more) depending on the particular setup program and the specified logging level.

Setup programs write entries to the log file as events occur. In some cases, one error might lead to another. It is important to find the first error in the chain in order to properly troubleshoot an issue.

Both errors and non-error information may be written to the log file. A return value of 3 indicates an error or failure entry in the log. You can save time by searching for the string “return value 3”. The following log entry is an example of a failure:

```
Action ended 14:04:40: InstallFinalize. Return value 3.
```

This message in this example is not an actual error, but an indication of where the error occurred. The preceding lines in the log file indicate the problem. Most installation errors are written to the log with a specific error code and, when available, an error message. These errors often provide enough information to enable you to resolve the issue. If not, a setup program log file will help your customer support representative quickly evaluate the problem.

Topics in this section include:

Installation errors

Errors during installation are problems that do not cause the setup program to perform a rollback operation. Most can be corrected and then the installation completed. The following table lists common installation errors.

Problem	Possible cause
While installing any component, the setup program indicates that you have supplied an invalid password when in fact the password is correct.	An authentication problem occurs when the user is logged into a computer without the necessary access rights to query the Windows domain. This happens when both of the following conditions are true: • The user is logged into a local user account while running the setup program. • The credentials causing the authentication failure are domain credentials.

Command-line installation failures

Command-line installation failures include:

- Syntax errors, page 133
- Common command-line installation errors, page 133

Syntax errors

Unattended installations, page 88 explains how to install InputAccel from command-line instructions. When using this method, the command line can become very long due to the number of InputAccel features and options. It is easy to make mistakes in the command-line syntax, resulting in installation failure.

Many command-line errors occur because the command line contains syntax errors or incomplete information. The command line contains a series of variables known as "installer properties," which define the features to install and the configuration of the installation. For example, you can specify command-line parameters for SQL Server to enable the setup program to connect to the InputAccel Database.

Installer properties are key/value pairs specified in a PROPERTY=VALUE syntax. Some properties require their values to be encapsulated in quotes (" "). For example:

```
setup.exe /s /v"/qn ADDLOCAL="ALL""
```

Note that every open quote character must have a matching close quote character. This example shows one quoted parameter correctly nested within another quoted parameter. A common error is to omit or misplace one or more quote marks.

The best way to troubleshoot command line installation issues is to examine the setup program log files, as explained in Installation failures, page 131.

Common command-line installation errors

The following table lists some of the more common errors that customers experience when running setup programs from the command line.

Problem	Possible cause
Installation does not occur silently — the user interface displays and waits for a response.	A space character was typed between **/v** and the first open quote symbol.
The message "`Please go to the Control Panel to install and configure system components`" is displayed.	The setup command was not executed from the directory containing the `setup.exe` program.

Problem	Possible cause
Windows restarts automatically after setup completes.	If the setup program determined that a restart was necessary to complete the installation, it performs an automatic restart. This behavior can be changed by including one of the following restart options: **`/norestart`**: Do not restart after setup completes. **`/promptrestart`**: Prompt the user to restart if necessary. **`/forcerestart`**: Always restart after setup completes, regardless of whether the setup program determines that a restart is necessary.
Client installation requires 1024 x 768 display resolution.	Regardless of whether you are running modules as applications or as services, and regardless of whether you are installing on a physical computer or in a VMware image, your client computer must have its screen resolution set to a minimum of 1024 x 768. If set to a lower resolution, the setup program will not allow you to proceed.
Installation does not occur.	The command line exceeds the maximum allowable length of 1066 characters. You can verify this problem by observing the Windows Task Manager and noting that the setup program starts and then exits before installation occurs.

Miscellaneous installation errors.	Syntax issues can cause various errors when attempting a command-line installation. Note the following rules:
	• Properties containing spaces must be enclosed in quotation marks that have been escaped with a backslash character (\"). Example:
	`INSTALLDIR=\"c:\Program Files\InputAccel\Client\"`
	• Properties containing the reserved characters `\`, `&`, `|`, `>`, `<`, and `^` must escape those character with a caret character (^). Example:
	`SCANNERNAME=\"Canon DR-4580U ^& DR-5580U\"`

Third-party component issues

Certain InputAccel client modules rely on third-party components provided by the company that produces the application to which they connect. There are two categories of modules with this issue: those that will not install without the required third-party components, and those that will install, but not run, without the required third-party components.

- Modules that will not install until third-party components are installed
  - ApplicationXtender Export
  - ECM Web Services Importer (Requires IIS 5.1 or 6.0 with support for ASP pages enabled. IIS must be running to enable installation of this module.)
  - IBM CM Advanced Export
- Modules that install but will not run until third-party components are installed
  - Documentum Advanced Export
  - FileNet Panagon IS/CS Export
  - Global 360 Export
  - IBM CMIP-390 Export
  - IBM CMIP-390 Index
  - IBM CSSAP Export
  - ODBC Export
  - Open Text Livelink Advanced Export
  - Values to XML

For a detailed list of additional software requirements for client modules, refer to Module-specific requirements, page 16.

Post-installation issues

This section provides troubleshooting tips for issues that can occur after a successful installation, including:

Database issues

The InputAccel Database is a required component of an InputAccel system that resides in an instance of Microsoft SQL Server 2005. SQL Server must be configured to enable the InputAccel system to connect and communicate with both the InputAccel Database and the msdb system database. Following are some common problems that can occur.

Problem	Possible cause
InputAccel Database setup program cannot create the InputAccel Database.	1. SQL Server and SQL Server Agent are not running. On the SQL Server host computer, use the Windows Service Control Manager to locate the SQL Server and SQL Server Agent services and make sure they are both started. 2. Inadequate SQL Server permissions. During InputAccel Database setup, the account specified to create the InputAccel Database must be assigned the `sysadmin` Server Role. Typically, you would enable the "sa" (system administrator) account login and assign it a password within SQL Server and then specify this account to install the InputAccel Database.
InputAccel components cannot connect to SQL Server.	1. TCP/IP protocol is disabled within SQL Server. Consult the SQL Server documentation for instructions on enabling the TCP/IP protocol. Restart the SQL Server service after changing this setting. 2. The SQL Server is not listening on the expected port. (The default SQL Server port is 1433; the default SQL Server Express port is 1096. These may have been changed during SQL Server configuration.) Specify the correct port in the connection information during InputAccel setup.

Problem	Possible cause
InputAccel components cannot log into SQL Server.	1. **SQL Server Authentication mode** is not enabled. InputAccel does not support Windows authentication. You must specify a SQL Server user name and password to connect. Consult SQL Server documentation for instructions on enabling **SQL Server and Windows Authentication mode**. 2. When enabling SQL Server Authentication mode, the **User must change password at next login** checkbox was selected. The first time an InputAccel component attempts to connect to the InputAccel Database, SQL Server attempts to prompt for a password change. Because the InputAccel component has no user interface to support changing the password, it cannot connect. You must ensure that SQL Server does not prompt for a password change. 3. SQL Server is using a named instance. When specifying a connection string to the SQL Server, you must include the instance name as follows: *hostname**instancename*
InputAccel components cannot access the InputAccel Database or the msdb system database.	Insufficient access rights. The account specified during InputAccel component installation to connect to these databases must be a member of the `db_owner` Database Role. The InputAccel Database was renamed or the service was stopped. If the database is renamed, all InputAccel components must be reconfigured to connect to the database using the new name. If the service was stopped, it must be restarted.

ScaleServer issues

When multiple InputAccel Servers are configured as a ScaleServer group, client modules must connect to one of the InputAccel Servers in the ScaleServer group by using the computer name of the computer hosting the InputAccel Server. If an IP address or the name “localhost” is used in the **Server name** field of the connection string, the connection to the server will fail.

Other issues

This section explains some common problems that may occur during InputAccel setup.

Problem	Possible cause
InputAccel Client setup fails to connect to InputAccel Server.	1. InputAccel Server service is not running. On the InputAccel Server host computer, use the Windows Service Control Manager to locate the InputAccel Server service and make sure it is started. 2. Client cannot communicate with server. Verify that the client computer(s) and the InputAccel Server are all configured to communicate on the same port (10099, by default). 3. The machine name of the InputAccel Server is longer than 15 characters. Machine names longer than 15 characters are truncated by NetBIOS software and result in an inability to connect to the InputAccel Server. 4. Hostname resolution fails. If you are attempting to connect using a computer name rather than an IP address, make sure the name resolves to an IP address by using the command line **`ping`** or **`nslookup`** program. 5. A firewall is blocking access. Make sure the InputAccel Server host computer's firewall, if any, is configured to pass incoming network traffic on the required port (10099, by default).
The error "Setup has detected that the SQL Server *servername* is not configured properly" occurs during InputAccel Database setup.	The SQL Server host computer was renamed after SQL Server was installed. The host name registered within SQL Server must match the host name of the computer. This is a common problem when using VMware to host InputAccel Server. A Microsoft Knowledge Base article provides a SQL query that fixes this issue.
Web Services Input or Output modules do not function.	Be sure that the Web Services Hosting service and the Web Services Coordinator service have been started in the Windows Service Control Manager.
Remote modules exhibit a long delay when logging into the InputAccel Remoting server.	Be aware that logging into a remote module that is connecting through the InputAccel Remoting host takes considerably longer than modules that are logging in locally, because in addition to authenticating and authorizing the user, the module also downloads configuration information, client-side scripts, and a list of batches.

Problem	Possible cause
Cannot specify `-department` (or other command-line arguments) when starting a ClickOnce-deployed module.	Command-line arguments are not supported when ClickOnce packages are deployed from a file share. You must deploy modules from a URL to specify command-line arguments. Furthermore, the command-line arguments have a different syntax when specified as part of a URL. This syntax is explained in the Understanding Command Line Arguments topic in each applicable module guide.
When using IPv6, the Administration Console does not run when you have entered its URL in Internet Explorer.	When the Administration Console web component was installed, a specific IP address was specified in the **IP address to use for this web site** field. To fix the issue, uninstall and reinstall the Administration Console web component, and this time specify **(All Unassigned)** in this field.
PrimeOCR Plus runs slowly and eventually runs out of memory or does not process pages at all (64-bit platforms only).	On 64-bit Windows platforms, PrimeOCR Plus must run with Data Execution Prevention disabled, as explained in Table 5, page 17.
In some cases, a notebook computer that does not have a parallel port encounters a `STOP` error (displays a blue screen with an error message and shuts down) after being undocked from a docking station that has a parallel port (when the notebook computer is running the InputAccel Server).	The Sentinel driver that is installed for use with a parallel port hardware security key is causing the issue, even though you may not be using a parallel port security key. To prevent this problem, use Windows Device Manager to disable the Sentinel driver in all hardware profiles. The Sentinel driver can be found under “Non-Plug And Play Drivers.”

Appendix A

InputAccel client modules

The following table lists all InputAccel 6.0 client modules and their capabilities.

Note: The client setup program installs additional applications that are not client modules. This includes the following applications:

- Process Developer
- Web Services Coordinator
- Web Services Hosting

Table 10. InputAccel modules

Module name	Executable name	New in version 6.0	Scale-Server-compatible	Runs in attended mode	Runs in unattended mode	Can run as service	Multiple service instances	Client-side scripting support
ApplicationXtender Export	`exax.exe`	-	✓	✓	✓	-	N/A	-
Archive Export	`exsapal.exe`	-	✓	✓	✓	-	N/A	-
Auto Annotate	`iastamp.exe`	-	-	✓	✓	-	N/A	-
Copy	`iacopy.exe`	-	-	✓	✓	-	N/A	-
DLL Viewer	`pixload.exe`	-	-	✓	-	-	N/A	-
Documentum Advanced Export	`DocumentumAdvancedExport.dll`	✓	✓	✓	✓	✓	✓	✓
ECM Web Services Importer	-	-	✓	✓	✓	-	N/A	-
ECM Web Services Importer Configuration	-	-	-	✓	-	-	N/A	-
Email Import	`EmailImport.exe`	-	-	✓	✓	✓	-	-
FileNet Content Manager Export	`exfncm.exe`	-	✓	✓	✓	-	N/A	-
FileNet Panagon IS/CS Export	`iaxfnet2.exe`	-	-	✓	✓	-	N/A	-
File System Export	`exfile.exe`	-	-	✓	✓	-	N/A	-

Module name	Executable name	New in version 6.0	Scale-Server-compatible	Runs in attended mode	Runs in unattended mode	Can run as service	Multiple service instances	Client-side scripting support
Global 360 Export formerly known as eiStream WMS Export	`iaexwnt.exe`	-	-	✓	✓	-	N/A	-
IBM CM Advanced Export	`exicm.exe`	-	✓	✓	✓	✓	-	-
IBM CMIP-390 Export	`iaexfaf.exe`	-	✓	✓	✓	-	N/A	-
IBM CMIP-390 Index	`iafafidx.exe`	-	✓	✓	✓	-	N/A	-
IBM CSSAP Export	`excssap.exe`	-	✓	✓	✓	-	N/A	-
Image	`iaimage.exe`	-	✓	✓	✓	✓	-	-
Image Divider	`ImageDivider.dll`	✓	✓	✓	✓	✓	✓	✓
Image Enhancement	`iaipi.exe`	-	✓	✓	✓	✓	-	-
Image Export	`iaeximg.exe`	-	✓	✓	✓	✓	-	-
Image Quality Assurance	`iaiqa.exe`	-	-	✓	-	-	-	-
IndexPlus	`IndexPlus.dll`	✓	✓	✓	-	-	-	✓
Index Export	`iaexidx.exe`	-	-	✓	✓	✓	-	-
MS SharePoint Export	`exshrpt2.exe`	-	✓	✓	✓	-	-	-

Module name	Executable name	New in version 6.0	Scale-Server-compatible	Runs in attended mode	Runs in unattended mode	Can run as service	Multiple service instances	Client-side scripting support
Multi	`iamulti.exe`	-	✓	✓	✓	✓	-	-
Multi-Directory Watch	`MultiDirectoryWatch.exe`	-	✓	✓	✓	✓	-	-
NuanceOCR	`NuanceOCR.dll`	✓	✓	✓	✓	✓	✓	✓
ODBC Export	`iaxodbc2.exe`	-	✓	✓	✓	✓	-	-
Open Text Livelink Advanced Export	`exll2.exe`	-	✓	✓	✓	-	-	-
Page Registration	`pagereg.exe`	-	✓	✓	✓	-	-	-
PDF Export	`iaexpdf.exe`	-		✓	✓	-	-	-
Pixview	`iademon.exe`	-	-	✓	-	-	-	-
PrimeOCR Plus	`PrimeOCRPlus.dll`	✓	✓	✓	✓	✓	✓	✓
RescanPlus	`RescanPlus.dll`	✓	-	✓	-	-	-	✓
ScanPlus	`ScanPlus.dll`	✓	✓	✓	-	-	-	✓
Script Engine	`ScriptEngine.dll`	✓	✓	✓	✓	✓	✓	✓
Spawn	`iaspawn.exe`	-	-	✓	✓	-	-	-
Timer	`iatimer.exe`	-	✓	✓	✓	✓	-	-
Values to XML	`val2xml.exe`	-	-	✓	✓	✓	-	-

Module name	Executable name	New in version 6.0	Scale-Server-compatible	Runs in attended mode	Runs in unattended mode	Can run as service	Multiple service instances	Client-side scripting support
Web Services Input	`WebServicesInput.dll`	✓	✓	-	-	✓	✓	✓
Web Services Output	`WebServicesOutput.dll`	✓	✓	-	-	✓	✓	✓

Appendix B

Ports used

The following table lists the ports used by the various components of the InputAccel application.

Table 11. Ports used

Port	Used for
1433	The SQL Server default port.
1096	The SQL Server Express default port.
40571	The TCP port that enables Web Services Coordinator to receive calls from Web Services Hosting through .NET Remoting.
12007	The TCP port that enables Administration Console to communicate with Web Services Coordinator.
10099	The default TCP port that enables InputAccel client modules to communicate with the InputAccel Servers and the InputAccel Remoting server, if used. This can be changed during installation and may be different for each InputAccel Server in a side-by-side installation.
80	The following may be changed during installation of these components: • The Administration Console default port for web browser connections. • The InputAccel Remoting default port for client connections.

Appendix C

Running the Create Database Utility

The Create Database Utility creates a SQL Server database. By default, the InputAccel Database setup program creates the InputAccel Database automatically. Use the Create Database Utility in the following circumstances:

- You disabled the default setting to create the InputAccel Database when running the InputAccel Database setup program.
- You have been directed by support personnel to update your InputAccel Database with scripts provided to you.

To run the Create Database Utility:

1. From the **Start** menu, click **Programs** > **InputAccel** > **Create Database Utility.**
2. From the **Server** list, type or select the name of the SQL Server on which you want to create the InputAccel database. If your SQL Server is using a named instance, append the instance name in this field, separated by a backslash ("\").
3. In the **Database** field, type the name of the database that you want to create.
4. Under **Authentication Mode**, type the login credentials for the SQL Server.
5. In the **Path to database scripts** field, type the root path to the `list.txt` file, which specifies all of the SQL scripts that need to be executed. Alternatively, click **Browse** to navigate to `list.txt`. The default installation scripts are installed in `C:\Program Files\InputAccel\Databases\DBScripts`. The top-level `lists.txt` file also can be found here.
6. Select the **Update existing database** checkbox to update the InputAccel Database for a patch or upgrade. If you are creating the database for the first time, clear the checkbox.
7. Click **OK** to save your settings, run the utility, and exit.

Related Topics —

Running the Create Database Utility in silent mode, page 150

Running the Create Database Utility in silent mode

The following command-line arguments must be issued in the order listed below to create the InputAccel SQL database and successfully perform the SQL Server validation:

Order	Command line argument	Description
1	**`CreateDbConsole`**	Required. Runs the Create Database Utility.
2	**`DBServer`**	Required. Name of the SQL Database Server.
3	**`DBName`**	Required. Name of the database that you want to create and populate with database scripts.
4	**`DBUserID`**	Required. User name for the SQL Server login screen, the database account, and the scripts to be executed.
5	**`DBPassword`**	Required. Password for the specified user name.
6	**`DBScriptDir`**	Required. Root path to the `list.txt` file, which specifies all of the SQL scripts that need to be executed.

Create Database Utility command-line examples

The following is a sample command-line that would create the database on a server called jsmith. It specifies a username of “sa” (system administrator) and a password of “pwd”:

```
CreateDbConsole jsmith IADB sa pwd C:\EIM\Emc.InputAccel\Data.Databases\
```

Appendix D

Command line arguments for installing InputAccel

InputAccel supports a subset of the standard InstallShield and Windows Installer command line arguments. All command line examples must be typed on one command line which may wrap to multiple lines in a command prompt window. The Windows Installer switches and InputAccel features and properties are case sensitive. Use the examples as they are shown. The topics in this section describe the supported command line instructions:

Supported InstallShield switches

The following table describes the supported InstallShield switches:

Table 12. Supported InstallShield switches

Switch	Description
/L	Specifies the language that the setup program uses, for example, 1033 for U.S. English.
/v	Passes the MSI parameter switches from the InstallShield setup command line to MSI.
/x	Removes a product.

For more information on the supported InstallShield switches, search the Internet for "Setup.exe and Update.exe Command-Line Parameters."

Related Topics —

Supported MSI switches, page 152
Supported Windows Installer properties, page 152
InputAccel installer properties and feature names, page 153

Supported MSI switches

InputAccel supports the Windows Installer version 3.1 command line parameters that enable you to install, display, restart, log information, update, and repair InputAccel installations. `Msiexec.exe` is the Windows Installer executable program that interprets packages and installs products.

Type **`msiexec.exe /?`** at a command prompt to view a complete list of the Windows Installer command line arguments.

Related Topics —

Supported InstallShield switches, page 151
Supported Windows Installer properties, page 152
InputAccel installer properties and feature names, page 153

Supported Windows Installer properties

The following table is a list of supported Windows Installer properties:

Table 13. Supported Windows Installer properties

Installer property	Description
ADDLOCAL	Locally installs a list of features, that are delimited by commas.
REMOVE	Removes a list of features, that are delimited by commas.
REINSTALL	Reinstalls a list of features, that are delimited by commas.
REINSTALLMODE	Specifies the type of reinstall to perform.
ARPSYSTEMCOMPONENT	Prevents the application from being displayed in the **Add or Remove Programs** list of **Control Panel**.
ARPNOMODIFY	Disables **Add or Remove Programs** functionality in **Control Panel** that modifies the product.
ARPNOREMOVE	Disables the **Add or Remove Programs** functionality in **Control Panel** that removes the product.
PROMPTROLLBACKCOST	Specifies the action the installer takes if rollback installation capabilities are enabled and there is insufficient disk space to complete the installation.
REBOOT	Suppresses certain prompts for a restart of the system. An administrator typically uses this property with a series of installations to install several products at the same time with only one restart at the end.
LIMITUI	Restricts the user interface level to Basic.

Refer to the **MSDN Library Windows Installer Property Reference** on the Internet for additional information regarding these properties.

Related Topics —

Supported InstallShield switches, page 151
Supported MSI switches, page 152
InputAccel installer properties and feature names, page 153

InputAccel installer properties and feature names

To perform a silent installation, use InstallShield and MSI command line parameters in conjunction with the InputAccel feature names and properties. You perform silent installations on the appropriate workstations to create the InputAccel Databases, InputAccel Server, InputAccel client modules, and InputAccel Web Components, which include the Administration Console and the Web Services components. The topics in this section describe installer properties and feature names:

- InputAccel Database installer properties, page 153
- InputAccel Server installer properties, page 156
- InputAccel Client installer properties, page 167
- InputAccel web components installer properties, page 173
- Installing the Backward Compatibility Pack from a command line, page 177

InputAccel Database installer properties

You can install the InputAccel Database in unattended mode using command line arguments. For example:

`setup.exe /s /v"/qn property=value /promptrestart"`

where “property = value” is a list of installer properties to be passed into the setup program.

At a minimum you must specify the **`ADDLOCAL`** property. For example:

`setup.exe /s /v"/qn ADDLOCAL="ALL" /promptrestart"`

`CreateDbConsole.exe` only runs when the **`CREATE_DATABASE`** installer property is set to a value of 1. This is the default value. In addition, the following installer properties must be specified:

- SQL Server name
- SQL Server port
- SQL Server username
- SQL Server password
- Database name

The `CreateDbConsole.exe` application must not be run in interactive mode during an unattended (or silent) installation.

The SQL Server port has a default value of 1433. This means that if this installer property is not passed in, 1433 is used. (The default SQL Server Express port is 1096.)

Note:

- Microsoft .NET 2.0 Service Pack 1 is required to enable purging capabilities
- SQL Server validation is not possible during a silent installation. It is the responsibility of the user to pass the correct information to `CreateDbConsole.exe`.

The following table lists the installer properties that can be specified when installing the InputAccel Database:

Table 14. Supported InputAccel Database installer properties

Installer property	Value	Description
ADDLOCAL	Features to install	A comma delimited list of the features to install. Since there is only one feature in this component to install, users should specify ALL.
CREATE_DATABASE	0/1	• 0: Do not install the InputAccel database. Only the database scripts are installed. • 1: Install the InputAccel database. A default value of 1 is used when this property is not specified.
DB_SERVER	Hostname	Hostname of the SQL Server. You can use (local) or localhost if you want to use the locally installed SQL Server.
DB_PORT	TCP port number	This is the TCP port on which the SQL Server listens for connections. The default value is 1433.
DB_NAME	Database name	The name of the configuration SQL database. The database name has the following restrictions: • The database name can have a maximum of 122 characters. • The database name can only contain the characters 0-9, A-Z, an underscore, $, #, @ and must begin with a number, a letter, or an underscore. A default value of “IADB” is used if this property is not specified.
DB_USER	SQL user name	The name of the SQL Server user name to connect to SQL Server.
DB_PASS	SQL password	The password for the SQL Server that the user specified in the DB_USER property.

InputAccel Database installer command-line examples

- The following command line silently installs `CreateDB.exe`, `CreateDbConsole.exe`, and the database scripts into the default installation directory. Note that in this example, the installer does not run `CreateDbConsole.exe`.

  `setup.exe /s /v"/qn ADDLOCAL=ALL CREATE_DATABASE=0 /promptrestart"`

- The following command line installs `CreateDB.exe`, `CreateDbConsole.exe`, and the database scripts into the directory specified by `INSTALLDIR`. Note that in this example, the installer does not run `CreateDbConsole.exe`.

  `setup.exe /s /v"/qn ADDLOCAL=ALL INSTALLDIR=\"c:\Program Files\InputAccel\Databases\" CREATE_DATABASE=0 /promptrestart"`

- The following command installs `CreateDB.exe`, `CreateDbConsole.exe`, and the database scripts into the default installation directory. `CreateDbConsole.exe` is executed to install the InputAccel Database on the locally installed SQL Server which listens for connections on the default port of 1433. The default InputAccel Database name is used.

  `setup.exe /s /v"/qn ADDLOCAL=ALL DB_SERVER="(local)" DB_USER="sa" DB_PASS="password" /promptrestart"`

- The following command line installs `CreateDB.exe`,`CreateDbConsole.exe`, and the database scripts into the directory specified by `INSTALLDIR`. `CreateDbConsole.exe` is executed to install the InputAccel database to the locally installed SQL Server, which listens for connections on the non-default port of 3999. The default InputAccel database name is used.

  `setup.exe /s /v"/qn ADDLOCAL=ALL INSTALLDIR=\"c:\Program Files\InputAccel\Databases\" CREATE_DATABASE=1 DB_SERVER="(local)" DB_PORT=3999 DB_USER=sa DB_PASS=password /promptrestart"`

- The following command line installs `CreateDB.exe`,`CreateDbConsole.exe`, and the database scripts into the directory specified by `INSTALLDIR`. `CreateDbConsole.exe` is executed to install the InputAccel database to the remote SQL Server named “CORP-SQL” which listens for connections on the default port of 1433. The default InputAccel database name is used.

  `setup.exe /s /v"/qn ADDLOCAL=ALL INSTALLDIR=\"c:\Program Files\InputAccel\Databases\" CREATE_DATABASE=1 DB_SERVER=CORP-SQL DB_USER=sa DB_PASS=password /promptrestart"`

Related Topics —

InputAccel Server installer properties, page 156
InputAccel Client installer properties, page 167
InputAccel web components installer properties, page 173
Installing the Backward Compatibility Pack from a command line, page 177

InputAccel Server installer properties

You can install the InputAccel Server in unattended mode using command line arguments. For example:

```
setup.exe /s /v"/qn property=value /promptrestart"
```

where "**property = *value***" is a list of installer properties to be passed into the setup program.

At a minimum, you must specify the **ADDLOCAL** and **IA_SERVICES_RUNAS_LOCAL_SYSTEM** properties. For example:

```
setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_RUNAS_LOCAL_SYSTEM="1"
/promptrestart"
```

Note:

- The root directories for each InputAccel Server must be specified when more than one instance is being installed. Each root directory must be unique and should be on its own hard disk drive. The properties for these instances are **IAS1_ROOT_DIR**, **IAS2_ROOT_DIR**, **IAS3_ROOT_DIR**, and so forth.
- The character limit on setup command line length is 1066 characters.

The following table lists the installer properties that can be specified when installing the InputAccel Server.

Table 15. Supported InputAccel Server installer properties

Installer property	Value	Description
ADDLOCAL	**Features to install**	Features to install. The following features are available: • **IASERVER**: InputAccel Server • **BASE_IAP_FILES**: Standard and compiled InputAccel process files. • **SERVER_DOCS**: Documentation to assist with the installation process.
INSTALLDIR	**Path**	The destination directory for the application files. A default value of **%ProgramFiles%\InputAccel\Server** is used when this property is not specified

Installer property	Value	Description
SERVER_INSTANCES	**1 - 8**	The number of InputAccel Server instances to install. A default value of 1 is used when this property is not specified.
REGISTER_DATABASE	**0/1**	• **0**: Do not perform DAL registration for the InputAccel Database. • **1**: Perform DAL registration for the InputAccel Database. A default value of 1 is used when this property is not specified.
DB_SERVER	**Hostname**	Hostname or computer name of the SQL Server. You can use (local) or localhost if you want to use the locally installed SQL Server.
DB_PORT	**TCP port**	The TCP port number to use to connect to the SQL Server. A default value of 1433 is used when this property is not specified.
DB_NAME	**Database name**	The name of the InputAccel Database. A default value of "IADB" is used if this property is not specified.
DB_USER	**SQL user name**	The name of the SQL Server user name to use to connect to the SQL Server.
DB_PASS	**SQL password**	The password of the SQL Server user specified in the **DB_USER** property.
AC_MACHINE_USER_NAME	**Username**	The user account specified as the **Run as** user for the Administration Console. This property is only valid when the InputAccel Server is installed on computers that are members of a Windows domain.
AC_MACHINE_DOMAIN_NAME	**Domain name**	The domain name of the user account specified as the **Run as** user for the Administration Console. This property is only valid when the InputAccel Server is installed on computers that are members of a Windows domain.

Installer property	Value	Description
CONFIGURE_WINDOWS_FIREWALL	**0/1**	This property is only valid when the Microsoft Windows Firewall is running and enabled. • **0**: Do not make configuration changes to the Windows Firewall. • **1**: Allow setup to configure the Windows Firewall. This is the default setting when the property is not passed in.
IAS_SERVICES_AUTOSTART	**0/1**	Automatically starts the InputAccel Server service for the first instance when Windows starts. • **0**: Manual. Do not start automatically. • **1**: Automatically start the InputAccel Server service for the first instance when Windows starts. The default value is 1 unless otherwise specified.
IAS1_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance **1**. A default path of *WINDRIVE*\IAS is used when this property is not specified. For example, the path is `C:\IAS` when Windows is installed on the C: drive. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.
IAS2_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 2. This value is only used when the installer property **SERVER_INSTANCES** is equal to or greater than 2. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.

Installer property	Value	Description
IAS3_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 3. This value is only used when the installer property **SERVER_INSTANCES** is equal to or greater than 3. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.
IAS4_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 4. This value is only used when the installer property **SERVER_INSTANCES** is equal to or greater than 4. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.
IAS5_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 5. This value is only used when the installer property **SERVER_INSTANCES** is equal to or greater than 5. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.
IAS6_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 6. This value is only used when the installer property **SERVER_INSTANCES** is equal to or greater than 6. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.

Installer property	Value	Description
IAS7_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 7. This value is only used when the installer property SERVER_INSTANCES is equal to or greater than 7. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.
IAS8_ROOT_DIR	**Path**	The destination directory for the root directory used by InputAccel Server instance 8. This value is only used when the installer property **SERVER_INSTANCES** is equal to 8. **Caution:** The path length must not be greater than 109 characters and cannot be the same as the root directory for any other InputAccel Server instance.
ACTIVE_ACTIVE_ CLUSTER	**0/1**	Determines whether the InputAccel Server can be configured to be used in an Active/Active cluster. • **0**: The InputAccel Server will not be configured for use in a Active/Active cluster. This is the default value when the property is not specified. • **1**: The InputAccel Server will be configured for use in an Active/Active cluster. The IP address for each InputAccel Server instance being installed must be specified when the value of this property is 1.
IAS1_IP_ADDR	**IP address**	The IP address that the first instance of InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS2_IP_ADDR	**IP address**	The IP address that the second instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.

Installer property	Value	Description
IAS3_IP_ADDR	**IP address**	The IP address that the third instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS4_IP_ADDR	**IP address**	The IP address that the fourth instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS5_IP_ADDR	**IP address**	The IP address that the fifth instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS6_IP_ADDR	**IP address**	The IP address that the sixth instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS7_IP_ADDR	**IP address**	The IP address that the seventh instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS8_IP_ADDR	**IP address**	The IP address that the eighth instance of the InputAccel Server listens to for network connections. This parameter should only be used when the property **ACTIVE_ACTIVE_CLUSTER** has a value of **1**.
IAS1_TCP_PORT	**TCP port**	InputAccel Server instance 1 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IAS2_TCP_PORT	**TCP port**	InputAccel Server instance 2 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IAS3_TCP_PORT	**TCP port**	InputAccel Server instance 3 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IAS4_TCP_PORT	**TCP port**	InputAccel Server instance 4 listens to the specified TCP port number. The default value is 10099 when this value is not specified.

Installer property	Value	Description
IAS5_TCP_PORT	**TCP port**	InputAccel Server instance 5 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IAS6_TCP_PORT	**TCP port**	InputAccel Server instance 6 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IAS7_TCP_PORT	**TCP port**	InputAccel Server instance 7 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IAS8_TCP_PORT	**TCP port**	InputAccel Server instance 8 listens to the specified TCP port number. The default value is 10099 when this value is not specified.
IA_SERVICES_RUNAS_LOCAL_SYSTEM	**1/2**	• **1**: The InputAccel Server service runs without using the **Local System** account. When this option is selected, you must specify a username and password. • **2**: The InputAccel Server service runs using the **Local System** account.
IA_SERVICES_RUNAS_USER_ACCT	**Domain\Username**	The InputAccel Server service uses this account when running. When specifying a local account, use a "\" (without quotes) in front of the user name. When specifying a domain account, use **domain\username**. This option is only used when the installer property **IA_SERVICES_RUNAS_LOCAL_SYSTEM** is passed in with a value of 2 indicating that the installer uses a specific user account and not the built-in local system account.
IA_SERVICES_RUNAS_PSWD	**Password**	The InputAccel Server service uses this password with the user account specified for running this service. This option is only used when the installer property **IA_SERVICES_RUNAS_LOCAL_SYSTEM** is passed in with a value of 2 indicating that the installer uses a specific user account and not the built-in local system account.

Topics in this section include:

- InputAccel Server installation features, page 163
- InputAccel Server installer command-line examples, page 163

InputAccel Server installation features

Note: Multiple features can be specified by delimiting each feature with a comma.

The following are supported feature names that can be specified when installing the InputAccel Server:

Feature name	Description
IASERVER	Installs the InputAccel Server sub-features that manage all client module activity and acts as the repository for all InputAccel batches, processes and other data.
BASE_IAP_FILES	Installs the standard InputAccel process files (IAP) only. These files are installed to a default location of *[WindowsVolume]*\IAS.
SERVER_DOCS:	Installs documentation to assist with the installation process.

Related Topics —

InputAccel Server installer properties, page 156
InputAccel Server installer command-line examples, page 163

InputAccel Server installer command-line examples

- The following command installs one instance of the InputAccel Server into the default installation directory. The service is installed and runs under the built-in **Local System** account. It does not perform DAL registration. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_RUNAS_LOCAL_SYSTEM=1
  REGISTER_DATABASE=0"
  ```

- The following command installs one instance of the InputAccel Server into the directory specified by **INSTALLDIR**. The service is installed and runs under the built-in Local System account. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system does not restart even when a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" IA_SERVICES_RUNAS_LOCAL_SYSTEM=1
  DB_SERVER="(local)" DB_USER="sa" DB_PASS="password" /norestart"
  ```

- This command installs one instance of the InputAccel Server into the directory specified by **INSTALLDIR**. The root directory for the InputAccel Server instance is specified by **IAS1_ROOT_DIR**. The service is installed and runs under the built-in Local System account. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The user is prompted to restart Windows if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" IAS1_ROOT_DIR=\"C:\IADataFiles\"
  IA_SERVICES_RUNAS_LOCAL_SYSTEM="1" DB_SERVER="(local)" DB_USER="sa"
  DB_PASS="password" /promptrestart"
  ```

- This command installs one instance of the InputAccel Server into the directory specified by **INSTALLDIR**. The service is installed and runs under the built-in Local System account. It does not configure the Windows Firewall (if it is installed and running). The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" IA_SERVICES_RUNAS_LOCAL_SYSTEM=1
  CONFIGURE_WINDOWS_FIREWALL=0 DB_SERVER="(local)" DB_USER="sa"
  DB_PASS="password""
  ```

- This command installs four instances of the InputAccel Server into the directory specified by **INSTALLDIR**. All four instances of the InputAccel service use the local Administrator user account (which has a password of "password") as the run-as credentials. The root directory for each InputAccel Server instance is specified by the properties **IAS*n*_ROOT_DIR**, where *n* is the number of the specific instance. The TCP port used by each InputAccel Server instance is specified by the properties **IAS*n*_TCP_PORT**, where *n* is the number of the specific instance. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" SERVER_INSTANCES=4 IAS1_ROOT_DIR=
  \"C:\IADataFiles\" IAS2_ROOT_DIR=\"E:\IADataFiles\" IAS3_ROOT_DIR=
  \"F:\IADataFiles\" IAS4_ROOT_DIR=\"G:\IADataFiles\" IAS1_TCP_PORT=10099
  IAS2_TCP_PORT=10100 IAS3_TCP_PORT=10101 IAS4_TCP_PORT=10102 IA_SERVICES_
  RUNAS_LOCAL_SYSTEM=2 IA_SERVICES_RUNAS_USER_ACCT=".\Administrator"
  IA_SERVICES_RUNAS_PSWD="password" DB_SERVER="(local)" DB_USER="sa"
  DB_PASS="password""
  ```

- This command installs all eight instances of the InputAccel Server into the directory specified by **INSTALLDIR**. All eight instances of the InputAccel service use the built-in Local System account as the run-as credentials. The root directory for each InputAccel Server instance is specified by the properties **IAS*n*_ROOT_DIR**, where *n* is the number of the specific instance. The TCP port used by each InputAccel Server instance is specified by the properties **IAS*n*_TCP_PORT**, where *n* is the number of the specific instance. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" SERVER_INSTANCES="8" IAS1_ROOT_DIR=
  \"C:\IADataFiles\" IAS2_ROOT_DIR=\"E:\IADataFiles\" IAS3_
  ROOT_DIR=\"F:\IADataFiles\" IAS4_ROOT_DIR=\"G:\IADataFiles\"
  IAS5_ROOT_DIR=\"H:\IADataFiles\" IAS6_ROOT_DIR=\"I:\IADataFiles\"
  IAS7_ROOT_DIR=\"J:\IADataFiles\" IAS8_ROOT_DIR=\"K:\IADataFiles\"
  IAS1_TCP_PORT=10099 IAS2_TCP_PORT=10100 IAS3_TCP_PORT=10101
  IAS4_TCP_PORT=10102 IAS5_TCP_PORT=10103 IAS6_TCP_PORT=10104
  IAS7_TCP_PORT=10105 IAS8_TCP_PORT=10106 IA_SERVICES_RUNAS_LOCAL_SYSTEM=1
  DB_SERVER="(local)" DB_USER="sa" DB_PASS="password""
  ```

- This command installs one instance of the InputAccel Server into the default installation directory. The InputAccel Server service uses the local Administrator user account (which has a password of "password") as the run-as credentials. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on a different computer (CORP-SQL), which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_RUNAS_LOCAL_SYSTEM=2
  IA_SERVICES_RUNAS_USER_ACCT=".\Administrator" IA_SERVICES_RUNAS_PSWD=
  "password" DB_SERVER="CORP-SQL" DB_USER="sa" DB_PASS="password""
  ```

- This command installs one instance of the InputAccel Server into the default installation directory. The InputAccel Server service uses the local Administrator user account (which has a password of "password") as the run-as credentials. The username and domain name of the user account running the Administration Console (the InputAccel Web Components website) are passed in, which is the user account CORP\CorpServices. The root directory for the InputAccel Server instance is specified by **IAS1_ROOT_DIR**. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on a different computer (CORP-SQL), which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" IAS1_ROOT_DIR=\"C:\IADataFiles\"
  IA_SERVICES_RUNAS_LOCAL_SYSTEM=2 IA_SERVICES_RUNAS_USER_ACCT=".
  \Administrator" IA_SERVICES_RUNAS_PSWD="password" AC_MACHINE_USER_
  NAME="CorpServices" AC_MACHINE_DOMAIN_NAME="CORP" DB_SERVER="CORP-SQL"
  DB_USER="sa" DB_PASS="password""
  ```

- This command installs eight instances of the InputAccel Server into the directory specified by **INSTALLDIR**. All eight instances of the InputAccel service use the built-in Local System account as the run-as credentials. The root directory for each InputAccel Server instance is specified by the properties **IAS*n*_ROOT_DIR**, where *n* is the number of the specific instance. The TCP port used by each InputAccel Server instance is specified by the properties **IAS*n*_TCP_PORT**, where *n* is the number of the specific instance. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on a different computer (CORP-SQL), which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" SERVER_INSTANCES=8 IAS1_ROOT_DIR=
  \"C:\IADataFiles\" IAS2_ROOT_DIR=\"E:\IADataFiles\" IAS3_
  ROOT_DIR=\"F:\IADataFiles\" IAS4_ROOT_DIR=\"G:\IADataFiles\"
  IAS5_ROOT_DIR=\"H:\IADataFiles\" IAS6_ROOT_DIR=\"I:\IADataFiles\"
  IAS7_ROOT_DIR=\"J:\IADataFiles\" IAS8_ROOT_DIR=\"K:\IADataFiles\"
  IAS1_TCP_PORT=10099 IAS2_TCP_PORT=10100 IAS3_TCP_PORT=10101
  IAS4_TCP_PORT=10102 IAS5_TCP_PORT=10103 IAS6_TCP_PORT=10104
  IAS7_TCP_PORT=10105 IAS8_TCP_PORT=10106 IA_SERVICES_RUNAS_LOCAL_SYSTEM=1
  DB_SERVER="CORP-SQL" DB_USER="sa" DB_PASS="password""
  ```

- This command installs eight instances of the InputAccel Server into the directory specified by **INSTALLDIR**. All eight instances of the InputAccel service use the local Administrator user account (which has a password of "password") as the run-as credentials. The root directory for each InputAccel Server instance is specified by the properties **IAS*n*_ROOT_DIR**, where *n* is the number of the specific instance. The TCP port used by each InputAccel Server instance is specified by the properties **IAS*n*_TCP_PORT**, where *n* is the number of the specific instance. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on a different computer (CORP-SQL), which listens for connections on the NON-default port of 3999. The NON-default InputAccel Database name is CORP_IADB. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Server\" SERVER_INSTANCES=8 IAS1_ROOT_DIR=
  \"C:\IADataFiles\" IAS2_ROOT_DIR=\"E:\IADataFiles\" IAS3_
  ROOT_DIR=\"F:\IADataFiles\" IAS4_ROOT_DIR=\"G:\IADataFiles\"
  IAS5_ROOT_DIR=\"H:\IADataFiles\" IAS6_ROOT_DIR=\"I:\IADataFiles\"
  IAS7_ROOT_DIR=\"J:\IADataFiles\" IAS8_ROOT_DIR=\"K:\IADataFiles\"
  IAS1_TCP_PORT=10099 IAS2_TCP_PORT=10100 IAS3_TCP_PORT=10101
  IAS4_TCP_PORT=10102 IAS5_TCP_PORT=10103 IAS6_TCP_PORT=10104
  IAS7_TCP_PORT=10105 IAS8_TCP_PORT=10106 IA_SERVICES_RUNAS_LOCAL_SYSTEM=2
  IA_SERVICES_RUNAS_USER_ACCT=".\Administrator" IA_SERVICES_RUNAS_PSWD=
  "password" DB_SERVER="CORP-SQL" DB_PORT=3999 DB_NAME="CORP_IADB"
  DB_USER="sa" DB_PASS="password""
  ```

- This command installs eight instances of the InputAccel Server into the directory specified by **INSTALLDIR**. This installation is configured to use a Microsoft Active/Active Cluster. All eight instances of the InputAccel service use the local Administrator user account (which has a password of "password") as the run-as credentials. The root directory for each InputAccel Server instance is specified by the properties **IAS*n*_ROOT_DIR**, where *n* is the number of the specific instance. The TCP port used by each InputAccel Server instance is specified by the properties **IAS*n*_TCP_PORT**, where *n* is the number of the specific instance. The IP address used by each InputAccel Server instance is specified by the properties **IAS*n*_IP_ADDR**, where *n* is the number of the specific instance. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on a different computer (CORP-SQL), which listens for connections on the default port of 1433. The NON-default InputAccel database name is CORP_IADB. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL=ALL SERVER_INSTANCES=8 IAS1_
  ROOT_DIR=\"C:\IADataFiles\" IAS2_ROOT_DIR=\"E:\IADataFiles\"
  IAS3_ROOT_DIR=\"F:\IADataFiles\" IAS4_ROOT_DIR=\"G:\IADataFiles\"
  IAS5_ROOT_DIR=\"H:\IADataFiles\" IAS6_ROOT_DIR=\"I:\IADataFiles\"
  IAS7_ROOT_DIR=\"J:\IADataFiles\" IAS8_ROOT_DIR=\"K:\IADataFiles\"
  IA_SERVICES_AUTOSTART=1 IA_SERVICES_RUNAS_LOCAL_SYSTEM=2 IA_SERVICES_
  RUNAS_USER_ACCT=".\Administrator" IA_SERVICES_RUNAS_PSWD="password"
  ACTIVE_ACTIVE_CLUSTER=1 IAS1_IP_ADDR=10.0.0.99 IAS1_TCP_PORT=10099
  IAS2_IP_ADDR=10.0.0.100 IAS2_TCP_PORT=10100 IAS3_IP_ADDR=10.0.0.101
  IAS3_TCP_PORT=10101 IAS4_IP_ADDR=10.0.0.102 IAS4_TCP_PORT=10102
  IAS5_IP_ADDR=10.0.0.103 IAS5_TCP_PORT=10103 IAS6_IP_ADDR=10.0.0.104
  IAS6_TCP_PORT=10104 IAS7_IP_ADDR=10.0.0.105 IAS7_TCP_PORT=10105
  IAS8_IP_ADDR=10.0.0.106 IAS8_TCP_PORT=10106 DB_SERVER=CORP-SQL
  DB_NAME=CORP_IADB DB_USER="sa" DB_PASS="password""
  ```

- This command installs only the sample process files (IAP) to the `C:\IAS` directory.

  `setup.exe /s /v"/qn ADDLOCAL=BASE_IAP_FILES"`

- This command installs only the sample process files (IAP) to the directory specified by the **`IAS1_ROOT_DIR`** property. In the following example, this directory is `C:\IASRootDir`.

  `setup.exe /s /v"/qn ADDLOCAL=BASE_IAP_FILES IAS1_ROOT_DIR= \"C:\IASRootDir\""`

- This command installs only the user documentation to *`ProgramFilesDirectory`*`\Common Files\EMC\InputAccel`. For example, if Windows is installed on the C: drive, the user documentation is installed into the directory `C:\Program Files\Common Files\EMC\InputAccel`. This location cannot be changed.

  `setup.exe /s /v"/qn ADDLOCAL=SERVER_DOCS"`

Related Topics —

InputAccel Server installer properties, page 156
InputAccel Client installer properties, page 167

InputAccel Client installer properties

You can install the **InputAccel Client** components in unattended mode using command line arguments. For example:

`setup.exe /s /v"/qn property=value /promptrestart"`

where “property = value” is a list of installer properties to be passed into the setup program.

At a minimum, you must specify the **`ADDLOCAL=ALL`** and **`IA_SERVICES_RUNAS_NAMED_ACCT`** property. For example:

`setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_RUNAS_NAMED_ACCT=0 /promptrestart"`

Note: Installing Documentum Advanced Export in unattended or silent mode does not check that the required Documentum software has been installed. In addition, the DFC PIA program, which is a library required by the Documentum Advanced Export, does not get installed when the installation runs silently.

The following table lists the installer properties that can be specified when installing the InputAccel Client components:

Table 16. Supported InputAccel Client installer properties

Installer property	Value	Description
ADDLOCAL	Features to install	This is a comma delimited list of the features to install. Refer to the features and components section of this document for a list of features.
IASERVERNAME	Hostname or IP address	The hostname or IP address of the InputAccel Server that the InputAccel client services connects to. **Note:** Some InputAccel Client modules will not start if this property is not specified during the silent installation.
IASERVERPORT	TCP port number	The TCP port number of the InputAccel Server that the IA client services connects to. The default value is 10099 unless otherwise specified. This value must be a number from 1 to 65535.
INSTALL_CLIENT_APPS_AS_SERVICES	0/1	• 0: Do not install compatible client applications as services. • 1: Install compatible client applications as services. A default value of 0 is used when this property is not specified. **Note:** The InputAccel Web Services modules always install as Windows services regardless of this setting because these modules cannot run as applications.
IA_SERVICES_AUTOSTART	0/1	• 0: InputAccel client services will not be set to start when Windows start. • 1: All InputAccel client services will be set to start when Windows start. A default value of 0 is used when this property is not specified.

Installer property	Value	Description
IA_SERVICES_RUNAS_NAMED_ACCT	0/1	• 0: All InputAccel client services run using the **Network Service** account. • 1: All InputAccel client services not run using the **Network Service** account. When this option is selected, you must specify a username and password. The properties **IA_SERVICES_RUNAS_USER_ACCT** and **IA_SERVICES_RUNAS_PSWD** must be specified when the value 1 is passed in. A default value of 1 is used when this property is not specified.
IA_SERVICES_RUNAS_USER_ACCT	Domain\Username	All InputAccel client services use this account to run the services. When specifying a local account, use a ".\" (without quotes) in front of the user name. When specifying a domain account, use domain\username. This option is only used when the services are set to run as the user account and not the **Network Service** account.
IA_SERVICES_RUNAS_PSWD	Password	All InputAccel client services use this password with the user account specified for running the services. This option is only used when the services are set to run as the user account and not the **Network Service** account.
SKIP_SCANNER_INSTALL	0/1	• 0: Installs a scanner driver during the installation. • 1: Skip the installation of a scanner driver. A default value of 0 is used when this installer property is not specified.
SCANNERNAME	**Driver**	The name of the scanner driver to install. The available drivers can be found in the \Clients\drivers\DRIVRMAP.TXT file on the InputAccel installation media.

Topics in this section include:

• InputAccel Client installation features, page 170

- InputAccel Client installer command-line examples, page 172

InputAccel Client installation features

Each feature listed in this table can be used to install its component during a silent installation by specifying its name as the **ADDLOCAL** property. You can specify more than one feature to install by separating the feature names with commas.

The following are supported feature names that can be specified when installing the InputAccel Server:

Feature name	Installs
P_DOCUMENTATION	User guides and other relevant InputAccel documentation
PDEV	Process Developer which enables administrators to design, debug, compile, and install InputAccel processes
SCRIPTING_LIBRARIES	Libraries and documentation used for writing custom client side scripts
PROCESS_FILES	Sample InputAccel process files (IAP) that can be modified with the Process Developer
SCRIPTING_LIBRARIES	Libraries and documentation used for writing custom client side scripts
LL2_EXPORT	Open Text Livelink Advanced Export module
SHRPNT2_EXPORT	MS SharePoint Export module
FAF_EXPORT	IBM CMIP-390 Export module
ICM_EXPORT	IBM CM Advanced Export module
CMNSTORE_EXPORT	IBM CSSAP Export module
WANGNT_EXPORT	Global 360 Export module
SAPAL_EXPORT	Archive Export module
FILENET_EXPORT	FileNet Panagon IS/CS Export module
FNCM_EXPORT	FileNet Content Manager Export module
AX_EXPORT	ApplicationXtender Export module
DCTM_ADVANCED_EXPORT	Documentum Advanced Export module
FILE_EXPORT	File System Export module
INDEX_EXPORT	Index Export module
IMAGE_EXPORT	Image Export module
ODBC_EXPORT	ODBC Export module
PDF_EXPORT	PDF Export module
VAL2XML	Values to XML module
IPI	Image Enhancement module
IQA	Image Quality Assurance module

Feature name	Installs
PAGEREG	Page Registration module
IMAGE_DIVIDER	Image Divider module
STAMP	Auto Annotate module
FAF_INDEX_	IBM CMIP-390 Index module
INDEX_APPLICATION	IndexPlus module
INDEX_CLICKONCE	ClickOnce deployable package of IndexPlus
NUANCE_OCR	NuanceOCR module
PRIME_OCR	PrimeOCR Plus module
TEST_IMAGES	Sample test images
PATCH_CODE_IMAGES	Sample Patch code II, III, and T pages that users can print and then use when scanning batches
COPY	Copy module
MULTI	Multi module
TIMER	Timer module
IMAGE	Image module
SPAWN	Spawn module
PIXVIEW	Pixview module
SCRIPT_ENGINE	Script Engine module
EMAIL_IMPORT	Email Import module
MULTIDIRECTORY_WATCH	Multi-Directory Watch module
SCAN_APPLICATION	ScanPlus module
SCAN_CLICKONCE	ClickOnce deployable package of the ScanPlus module
RESCAN_APPLICATION	RescanPlus module
RESCAN_CLICKONCE	ClickOnce deployable package of the RescanPlus module
ECM_IMPORTER	ECM Web Services Importer module
WEB_SERVICES_COORDINATOR	Web Services Coordinator component
WEB_SERVICES_HOSTING	Web Services Hosting component
WEB_SERVICES_INPUT	Web Services Input module
WEB_SERVICES_OUTPUT	Web Services Output module

Related Topics —

InputAccel Client installer command-line examples, page 172
InputAccel Client installer properties, page 167

InputAccel Client installer command-line examples

- This command installs all client components into the directory specified by **INSTALLDIR**. The InputAccel services are installed and are using the built-in Windows Network Service account as the run-as user account. The installed InputAccelclient services connect to the InputAccel Server PROD-IASERVER when started. The services do not start automatically when Windows starts. The system does not restart after installation even when a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" INSTALLDIR=\"c:\Program
  Files\InputAccel\Client\" INSTALL_CLIENT_APPS_AS_SERVICES=1
  IA_SERVICES_RUNAS_NAMED_ACCT=0 IASERVERNAME="PROD-IASERVER" /norestart"
  ```

- This command installs all client components into the default installation directory. The InputAccel services are installed and are using the built-in Windows Network Service account as the run-as user account. The installed InputAccel client services connect to the InputAccel Server PROD-IASERVER when started. The services start automatically when Windows starts. The system automatically restarts after installation if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_AUTOSTART=1
  INSTALL_CLIENT_APPS_AS_SERVICES=1 IA_SERVICES_RUNAS_NAMED_ACCT=0
  IASERVERNAME="PROD-IASERVER" IASERVERNAME="PROD-IASERVER"
  ```

- This command installs all client components into the default installation directory. The InputAccel services are installed and use a specific Windows user account as the run-as user account. The installed InputAccel client services connect to the InputAccel Server PROD-IASERVER when started. The services start automatically when Windows starts. The system does not restart after installation even if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ALL" IA_SERVICES_AUTOSTART=1
  INSTALL_CLIENT_APPS_AS_SERVICES=1 IA_SERVICES_RUNAS_NAMED_ACCT=1
  IASERVERNAME="PROD-IASERVER" IA_SERVICES_RUNAS_USER_ACCT=".
  \Administrator" IA_SERVICES_RUNAS_PSWD="password" /norestart"
  ```

- This command installs ScanPlus into the default installation directory. The scanner driver Canon DR-4580U is installed during the installation. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="SCAN_APPLICATION" SCANNERNAME=\"Canon
  DR-4580U\""
  ```

- This command installs IndexPlus into the default installation directory. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="INDEX_APPLICATION""
  ```

Related Topics —

InputAccel Client installer command-line examples, page 172
InputAccel Client installation features, page 170

InputAccel web components installer properties

You can install InputAccel Web components in unattended mode using command line arguments. For example:

```
setup.exe /s /v"/qn property=value /promptrestart"
```

where "**property = *value***" is a list of installer properties to be passed into the setup program. The list of properties is available in the table below. At a minimum you must specify the **ADDLOCAL**, **WEB_SITE_RUNAS_USER**, **AC_WEB_SITE_RUNAS_USER**, and**WEB_SITE_RUNAS_PSWD** properties. For example:

```
setup.exe /s /v"/qn ADDLOCAL="ADMINISTRATION_CONSOLE" WEB_SITE_RUNAS_USER=
"Administrator" WEB_SITE_RUNAS_PSWD="password" /promptrestart"
```

Note: In a silent installation, SQL Server validation cannot be performed.

The following table lists the installer properties that can be specified when installing the InputAccel web components:

Table 17. Supported InputAccel Web component installer properties

Installer property	Value	Description
ADDLOCAL	Features to install	This is a comma delimited list of the features to install. The following features are available for installation: • **ADMINISTRATION_CONSOLE**: Installs the Administration Console • **IA_REMOTING**: Enables remote client modules access to the InputAccel Server and databases. **Note:** Only one of these features can be specified. The two features cannot be installed on the same computer.
REGISTER_ DATABASE	0/1	• **0**: Do not perform DAL registration for the InputAccel Database. • **1**: Perform DAL registration for the InputAccel Database. A default value of 1 is used when this property is not specified.
DB_SERVER	Hostname	Hostname or computer name of the SQL Server. You can use (local) or **localhost** if you want to use the locally installed SQL Server.
DB_PORT	TCP port	The TCP port to use to connect to SQL Server. A default value of 1433 is used if this property is not specified.

Installer property	Value	Description
DB_NAME	Database	The name of the InputAccel database. A default value of "IADB" is used if this property is not specified.
DB_USER	SQL user name	The name of the SQL Server user to use for connecting to SQL Server.
DB_PASS	SQL password	The password of the SQL Server user specified in the **DB_USER** property.
WEB_SITE_ DESCRIPTION	Website description	This is the description of the InputAccel Web Components IIS website. The default value "InputAccel Web Components" is used when this property is not specified.
WEB_SITE_IP_ ADDRESS	IP address	This is the IP address the InputAccel Web Components IIS website should listen to for available connections. The default value of " (All Unassigned)" is used when this property is not specified.
WEB_SITE_TCP_ PORT	TCP port	This is the TCP port on which the InputAccel Web Components IIS website listens for connections. The default value of 80 is used when this property is not specified. The InputAccel Web Components website will not function properly if the specified TCP port is in use by an existing IIS website. For example, the built-in IIS Default website.
WEB_SITE_RUNAS_ USER	Username	The user account under which the InputAccel Web Components run. **Note:** This is a required property. The silent installation quits if this property is not passed in the command line argument.
WEB_SITE_RUNAS_ PSWD	Password	The password of the user account specified in the installer property **WEB_SITE_RUNAS_USER**. Do not specify this value if the user account has a blank password.
WEB_SITE_RUNAS_ DOMAIN	Domain name	The domain the user account specified in the installer property **WEB_SITE_RUNAS_USER**. Do not specify this value if the user is a local user and not a domain user.
INPUT_ACCEL_ SERVER_NAME	Hostname or IP address	The hostname or IP address of the InputAccel Server to which the IIS Client Remoting feature connects. This property is only used when the feature **IA_REMOTING** is specified for the **ADDLOCAL** property.

Installer property	Value	Description
INPUT_ACCEL_ SERVER_PORT	TCP port	The TCP port of the **InputAccel Server** to which the IIS Client Remoting feature connects. A default value of 10099 is used when this property is not specified. This value must be a number from 1 to 65535. This property is only used when the feature **IA_REMOTING** is specified for the **ADDLOCAL** property.
IA_REMOTING_ VIRTUAL_DIR_NAME	Virtual directory name	The name of the virtual directory used by InputAccel Remoting. This name must be specified in the URL used by remote InputAccel clients to connect to the InputAccel Server through InputAccel Remoting.

This section includes the following topic:

- InputAccel web components installer properties, page 173

InputAccel web components installer command-line examples

- This command installs the Administration Console. DAL registration is not performed. The InputAccel Web Components website runs under the local Administrator account which has a password of “password”. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL=" ADMINISTRATION_CONSOLE" REGISTER_
  DATABASE=0 WEB_SITE_RUNAS_USER="Administrator" WEB_SITE_RUNAS_PSWD=
  "password""
  ```

- This command installs the Administration Console. The InputAccel Web Components website runs under the local Administrator account which has a password of “password”. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system does not restart even when a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ADMINISTRATION_CONSOLE" DB_SERVER=
  "(local)" DB_USER="sa" DB_PASS="password" WEB_SITE_RUNAS_USER=
  "Administrator" WEB_SITE_RUNAS_PSWD="password" /norestart"
  ```

- This command installs the Administration Console to run on TCP port 8080. The InputAccel Web Components website runs under the local Administrator account which has a password of “password”. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The default InputAccel Database name is used. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ADMINISTRATION_CONSOLE" DB_SERVER=
  "(local)" DB_USER="sa" DB_PASS="password" WEB_SITE_TCP_PORT=8080
  WEB_SITE_RUNAS_USER="Administrator" WEB_SITE_RUNAS_PSWD="password""
  ```

- This command installs the Administration Console to run on TCP port 8080. It performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer which listens for connections on the NON-default port of 2000. The default InputAccel Database name is used. The InputAccel Web Components website runs under the domain user account CORP\CorpServices which has a password of “password”.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ADMINISTRATION_CONSOLE" DB_
  SERVER="(local)" DB_PORT=2000 DB_USER="sa" DB_PASS="password"
  WEB_SITE_RUNAS_USER="CorpServices" WEB_SITE_RUNAS_PSWD="password"
  WEB_SITE_RUNAS_DOMAIN="CORP""
  ```

- This command installs the Administration Console. The InputAccel Web Components website runs under the local Administrator account which has a password of “password”. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. A custom InputAccel Database name, CORP_IADB, is used. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ADMINISTRATION_CONSOLE" DB_SERVER=
  "(local)" DB_USER="sa" DB_PASS="password" DB_NAME="CORP_IADB"
  WEB_SITE_RUNAS_USER="Administrator" WEB_SITE_RUNAS_PSWD="password""
  ```

- This command installs the Administration Console. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on the same computer, which listens for connections on the default port of 1433. The default InputAccel Database name is used. The InputAccel Web Components website runs under the domain user account CORP\CorpServices which has a password of “password”. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="ADMINISTRATION_CONSOLE" DB_SERVER=
  "(local)" DB_USER="sa" DB_PASS="password" WEB_SITE_RUNAS_USER=
  "CorpServices" WEB_SITE_RUNAS_PSWD="password" WEB_SITE_RUNAS_DOMAIN=
  "CORP""
  ```

- This command installs InputAccel Remoting. The installer performs DAL registration against the InputAccel Database on the SQL Server installed on a different computer, CORP-SQLSERVER, which listens for connections on the default port of 1433. The default InputAccel Database name is used. InputAccel Remoting is configured to connect to the InputAccel Server running on a different computer, IA-PRODUCTION. The InputAccel Web Components website runs under the local Administrator account which has a password of “password”. The system automatically restarts if a reboot is required.

  ```
  setup.exe /s /v"/qn ADDLOCAL="IA_REMOTING" DB_SRVR="(local)"
  DB_SERVER="CORP-SQLSERVER" DB_USER="sa" DB_PASS="password" INPUT_
  ACCEL_SERVER_NAME="IA-PRODUCTION" WEB_SITE_RUNAS_USER="Administrator"
  WEB_SITE_RUNAS_PSWD="password""
  ```

Related Topics —

InputAccel web components installer properties, page 173
Installing the Administration Console, page 60

Installing the Backward Compatibility Pack from a command line

The following command line enables InputAccel client modules version 5.2.3 or 5.3.0 to run in an InputAccel 6.0 environment:

To run the Backward Compatibility Pack:

1. Open a **Command Prompt** window.
2. At the command prompt, navigate to the `DLLOnly` subdirectory of the installation media.
3. Type **`setup.exe /s /v"/qn"`**.

Related Topics —

Upgrading client modules, page 123
Appendix A, InputAccel client modules

Index

D

E

F

G

H

I

L

M

N

O

P

R

S

T

U

V

W