
Infinite User Management

IUM Security and Technical Overview

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Security Overview

Database

- SQL databases are password protected by default and can utilize all of the security features of the Microsoft SQL Server platform if desired (including Windows/Integrated security).

Applications

- Different user roles can be created to manage system access. Some users can be granted full access to the system, others read-only access (for reporting), and others can be denied access except the ability to track their printing.
- Users can be prompted to enter either a secure PIN code or their network password to gain access to the administrator and reporting tools.
- Users can be prompted to enter either a secure PIN code or their network password for validation in order to print.
- PIN codes are stored in the database in encrypted form, never in clear text.
- Users can be authenticated against Active Directory if desired.

Data

- All data is stored in the SQL database. The data is as secure as the network / server on which it resides.

Network

- Communication between Client and Client Web Services is always SSL encrypted. IUM uses a self-signed certificate by default, which the system administrator can replace with their own certificate if desired
- All communication between the product components occurs on the local network, aside from licensing checks which are SSL secured.
- IUM supports secure SMTP when sending emails from the system

Internet-Based License Activation

- Normally, IUM licenses are activated via our secure licensing server using the HTTPS protocol. If it is not possible or desirable to activate over the Internet, the license can be activated manually.

Privacy

- No data is transmitted to third parties. The system can be configured to not track the document names and / or user names for each print job.

Technical Overview

IUM uses a client-based architecture. This has an important advantage over server-based tracking systems in that it allows tracking of all local as well as network printing by printer port and IP address identification, without utilizing valuable network bandwidth. Another equally important advantage is that tIUM is safe and easy to install, without any alteration of the existing network whatsoever.

System Requirements

Operating System requirements

Database and Administrative tools

- Windows 7 or later
- Min 5GB of free space
- .NET 4.5.2 is required, and will be installed if absent
- IIS is required and will be installed if absent

Client

- Windows 7 or later
- 10-20 MB of disk space
- The Client is comprised of two components: the Desktop Client and the Client Service.
 - The Desktop Client required between 5MB - 20MB, also depending on activity.
 - Client Service requires between 3MB - 10MB depending on activity.

Database Requirements

- Support for SQL Server (Full or Express) database back-ends.
- The amount of disk space used by the database is dependent on the type of database back-end as well as the amount of data being tracked.

Server Components

- PAI Task Windows Service is responsible for running all scheduled tasks, running reports and cleanup tasks. Expect a minimum memory usage from 50 MB to several hundred MB when running large reports
- PAI Release Windows Service is responsible for releasing held jobs, monitoring network card readers and cleaning up expired secure jobs. Expect a minimum memory usage from 50MB to several hundred MB, depending on size and activity of released jobs
- PAI Client and Secure Services is the web services component responsible for handling Client communication and securing jobs. Expect a minimum memory usage from 150MB to several hundred MB, depending on number of users
- PAI Web Administration - Main web site responsible for all UI. Minimum memory usage, 150MB. Will grow depending on activity, especially the viewing of large reports, can use several hundred MB.
- The Release Windows Service is always installed with the Client and Secure Services.
- The Task Windows Service is only installed with the Web Administration.
- For load sharing in large organizations it is recommended to have more than one computer running the PAI Client and Secure Services.

Client Installation Requirements and Memory Usage

- The Client will require approximately 10-20 MB of disk space.
- The Client is two components, the Desktop Client and the Client Service. Client Service uses between 3MB - 10MB depending on activity. The Desktop Client between 5MB - 20MB, also depending on activity.

Networking requirements

- TCP/IP networking
- Web based components use 80/443. If unavailable, IUM will then use to 6320/6321. If unavailable, the the setting can be user-defined
- No network traffic is created until a print job is initiated.
- When securing jobs the size of the raw job can be anywhere from 2k to 400MB, depending on the size of the document

Technical Advantages

Workstation-based IUM tracks from the workstation which enables it to track every print job. This also allows it to retrieve more information about each print job, such as the name of the program or the web site address. Also, tracking from the workstation, rather than the print server, requires less network bandwidth since port monitoring is not required to capture all locally connected and direct to IP devices.

Simple installation and setup IUM does not require any modification of the local network or print servers to track 100% of the printing activity. It installs easily to each workstation from a central location on the network.

Tracks everything IUM is the only print tracking software solution that tracks all print devices out of the box. Whether a print job goes through a print server, directly to a printer with its own IP address or to a local printer, IUM captures it. It will create an inventory of all print devices in use on the network, regardless of whether those devices are known to exist by the network administrator.

Controls printing costs

IUM's print rules can either suggest or force users to print to a more efficient printer based on wide variety of factors such as the number of pages in the print job. Rules can control color costs by limiting color usage by the user, computer, printer, number of pages, application and much more. It also helps organizations reduce their environmental impact by forcing users to print on both sides of the page.

Flexible reporting IUM includes two reporting tools that allow customers to decide on what data they would like to view. Users can design customized reports and export files according to the exact specifications required by their existing accounting and reporting systems.

All in one solution

Server-based solutions by their nature have to be broken up into various costly components that are needed to perform tasks, such as capturing, analyzing, and recovering costs. Organizations can take full advantage of IUM's cost analysis, reduction, recovery, and secure printing capabilities right out of the box.

Installation

IUM provides a simple, easy to use system of configuration files and batch files to allow organizations to quickly rollout the software to their network. It can be easily installed to thousands of workstations from a central location on the network using your existing deployment method such as Active Directory, login scripts, MSI Packages, or any mass installation tool.

Download the [Installation Guide](#) for more information.

IUM Tools

IUM provides several tools help you install, configure and report on your print tracking. Please note that you may not be able to use all of the features and tools described depending on your licensing.

Administration and Reporting - These tools provide the management and configuration interface for IUM and should be installed on only one server in the environment.

Secure Print and Client Services - These services are required to implement secure print release and to support the IUM Client software that will be deployed to client workstations.

Client - This Client can be deployed on all workstations from which you want to track printing or implement secure print release.

Support Tools

Client Status/Deployment – You use this tool to monitor the status of IUM Clients on your network . You can also use the tool to deploy the client to Windows NT and above computers in your organization.

Database Maintenance Tool – You can use this tool to create SQL databases, compact Access databases and change database passwords.

Data Migration Wizard – This tool allows you to upgrade Print Audit 6 SQL or Access databases to IUM databases