Centrix WorkSpace Discovery
Installation Guide
Version 1.0
The latest software version and documentation for this product can be downloaded here: http://www.centrixsoftware.com/downloads/discovery

If you have any feedback about the product or documentation, please submit to: enquiries@centrixsoftware.com

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**ABOUT THIS GUIDE**

The *Centrix WorkSpace Discovery Installation Guide* describes how to install and configure the Centrix WorkSpace Discovery application.

**Guide Overview**

This guide is intended for anyone wishing to install Centrix WorkSpace Discovery. It provides information about installation and initial configuration of the software. The document is intended for network administrators, consultants, analysts and any other IT professionals using the product.

**Document Feedback**

Centrix welcomes any feedback for documentation improvement. Comments should be submitted to enquiries@centrixsoftware.com.

**Centrix Workspace Discovery Documentation**

The Discovery documentation set consists of the following:

- *Discovery Installation Guide* (PDF)
- *Discovery User Guide* (PDF)

**Technical Support and Resources**

Support is available to customers who have a trial version of a Centrix product or who have purchased a commercial version and have a valid maintenance contract.

Support is accessed in the following ways:

- Email support directly at support@centrixsoftware.com for automatic case creation.

- Contact Centrix Software support directly via our global and local telephone numbers.

View the Centrix Software Support Guide for a detailed explanation of support programs, online services, contact information, and policy and procedures. The guide is available at: [http://www.centrixsoftware.com/support](http://www.centrixsoftware.com/support)

Product feedback and fault identification is welcomed, and comments should be submitted to enquiries@centrixsoftware.com.
INTRODUCTION TO WORKSPACE DISCOVERY

Centrix WorkSpace Discovery is part of Centrix WorkSpace 4 Suite, an IT intelligence and aggregation platform which enables organizations to reduce the cost of delivering applications and content whether physical, virtual, hosted, or web. The WorkSpace 4 Suite of products consists of WorkSpace IQ, which provides IT intelligence on application demand across the enterprise, WorkSpace Universal for aggregating the presentation of applications to end users and WorkSpace Discovery, a free of charge package delivering an end point assessment of current client hardware and software.

Centrix WorkSpace Discovery – Enables rapid analysis of existing traditional desktop environments and helps identify applications that can be remediated or removed entirely from the environment. This is particularly useful for identifying user, application and desktop candidates for virtualization. This enables technical feasibility to be understood at an early stage and helps to build a compelling business case for investing in an application and desktop delivery solution. It outlines the potential implementation options including physical devices, hosted virtual desktops (HVD), application virtualization or Terminal Services (RDS/TS) based technologies.

Centrix WorkSpace Discovery obtains detailed information from end-point devices within the enterprise, providing an accurate assessment of current client hardware and software. Centrix WorkSpace Discovery then applies intelligence to the collected data in order to provide valuable information in the form of detailed reports which are specifically designed to aid with the planning and optimization of application and desktop delivery.

WorkSpace Discovery includes smart agent discovery services designed to help partners and customers gain detailed information about the end devices currently located within the enterprise.

The smart agent based service is able to collect detailed information on application usage in addition to end-point assessment data of the physical devices. Smart collection technologies ensure only relevant device, device usage and application usage information is collected so that the volumes of data remain optimal. No customer data or sensitive content from applications is recorded or accessed.

WorkSpace Discovery applies intelligence to the collected data from the existing device estate and produces detailed reports to provide information designed to aid with the planning and optimization of application and desktop delivery including virtualization.
INSTALLATION

System Requirements

WorkSpace Discovery Server
The hardware specification is based upon SQL Express requirements as the Discovery Server does not have a significant impact on computing resource.

Typically, a Physical or Virtual Machine with a hardware specification of a minimum of 1.5Ghz CPU, 2GB RAM, 1000 Mbps Networking – and Windows 2003 SP1.

Disk space requirements vary depending upon size of environment and duration of monitoring timeframe. Example: 2,000 monitored PC’s over 4 weeks typically results in <200MB disk space usage.

WorkSpace Discovery Agent
This lightweight, low impact agent is packaged as a standard .msi installation file allowing for easy distribution to endpoints using standard software distribution techniques. This ensures low impact to administrators for deployment, and no disruption for users (no reboot required).

Supported target operating systems for WorkSpace Discovery Agent
- Microsoft Windows 2000 Professional and Server (All Editions)
- Microsoft Windows XP and Microsoft Windows 2003 Server (All Editions)
- Microsoft Windows Vista, Microsoft Windows 7 and Microsoft Windows Server 2008 (All Editions)

Typical endpoint resource usage
1MB disk space, 7MB memory, maximum 0.5% CPU utilization, 100K/Bytes initial scan per device, monitored approximately 10K/Bytes per day per device (based upon the default profile).
Pre-Requisites

WorkSpace Discovery Server
The following software should be installed prior to the installation of the Discovery Server.

- **SQL Express 2005.** Download from the Microsoft website and perform a default installation: [http://www.microsoft.com/sqlserver](http://www.microsoft.com/sqlserver)

- SQL Express Supported Configuration: Windows 2000 Service Pack 4; Windows Server 2003 Service Pack 1; Windows XP Service Pack 2. Computer with Intel or compatible Pentium III 600 MHz or faster processor (1 GHz or faster is recommended.). Minimum of 192 MB of RAM (512 MB or more is recommended.). 525 MB of available hard disk space.


- **.NET Framework 3.5 SP1**, is bundled with the Discovery installer, and will be installed automatically if required.

SQL Express 2008, including Management Tools, is also supported as an alternative to SQL Express 2005, and can be downloaded from the Microsoft website: [http://www.microsoft.com/sqlserver](http://www.microsoft.com/sqlserver). There are additional pre-requisite software requirements for SQL Express 2008 which can be found at the above link.

**Note:** If using SQL Express 2008, ensure that the default instance name remains as `sqlexpress` or the Discovery Server installation will fail.

Discovery Agent
The following software is also required prior to the agent installation.

- **MSI Windows Installer 3.1**

- **.NET 2.0 redistributable**
Networking & Environment Pre-Requisites

The following ports are utilised by the WorkSpace Discovery Server and Agents.

Discovery Server

The Discovery Server must be registered in your INTERNAL DNS and name resolution must be checked to ensure that the endpoints can resolve the Discovery Server by short name / hostname, and fully qualified domain name.

The following ports are used to communicate with the agents. Windows Firewall exceptions are automatically created on the Discovery Server as part of the installation process.

- 2021 (TCP)
- 2022 (TCP/UDP)
- 8080 (TCP)

Discovery Agent

The following ports are used to communicate with the agents. Windows Firewall exceptions are automatically created on the target machine as part of the installation process.

- 2021 (TCP)
- 2022 (TCP)

Automated Deployment of AGENT

Mass deployment of the agent can be achieved in conjunction with an Active Directory GPO, script or 3rd party deployment software.

Upon installation of the Discovery agent; The Agent will first send out a multicast broadcast on port 2021 in order to find the Discovery Server. If it does not receive a response it will follow up with a UDP broadcast on port 2022 (255.255.255.255).

Where using broadcasting across multiple networks, routers need to be specifically enabled to route these communications. In many environments this functionality is disabled in order to reduce the possibility of flooding networks with broadcast traffic.
If it is not possible or practical to enable broadcast routing, the alternative is to deploy the agents using a command line option which informs the agent of the location of the Discovery Server via http (Port 8080), and therefore does not broadcast.

**Agent Command Line Installation Options (No Broadcast Method)**

In the event that clients are unable to broadcast across networks to contact the Discovery Server, a command line option can be used to set clients to contact the server directly by entering its location. I.e. Replace the string `<Discovery Server IP Address>` with a valid IP address for your newly installed Discovery Server.

The following installation command should be typed in one single line:

```
msiexec /i "C:\<installation path>\WorkspaceDiscoveryAgent.msi" WebServiceMainUrl="http://<Discovery Server IP Address>:8080/CxDiscoCollector"
```
**Discovery Server Installation**

Ensure all pre-requisites are complete prior to starting the Discovery Server installation. Ensure you are logged in with **Administrative** level permissions.

Locate and double-click the *WorkspaceDiscoveryServer.exe*. The installation wizard will begin. Click **Next** at the Welcome screen.

License Agreement. Please read the license agreement, and then click the radio button to accept the terms; click **Next** to continue.

Destination Folder. Select *Change* for an alternative installation location or click **Next** to accept default.
Setup Type. For a new installation select the **Complete** option and click **Next**.
Ready to Install the Program. Click *Install* to proceed.

Once the installation has completed, the wizard will present a dialogue acknowledging successful installation together with some additional options. Click *Finish* to close the wizard.

The default installation does not require any further configuration in order to start collecting agent data.
Discovery Agent Installation

Ensure all pre-requisites are met prior to starting the Discovery Agent installation.

**Manual Install**

At the target machine open a network share to the location of the `WorkspaceDiscoveryAgent.msi` or copy the file locally, and **double-click** the .msi. This will initiate a silent installation.

**Update Agent**

To update the agent, the new version of the .msi needs to be placed in a new folder on the Discovery Server under the Discovery application root. The folder name should match the agent version number, e.g., "1.0.1.249".

The **Client Version** in *Discovery Settings ➔ System Configuration* should be changed to match this.

**Uninstall Agent**

To remove the agent from target machines, navigate to the Windows Control Panel installed programs dialogue. This varies between Operating Systems, eg: Windows XP is *Add or Remove Programs*, and Windows 7 is *Programs and Features*.

Find the *Workspace Discovery Service* and click **Remove**.

To script the removal of the agent from many machines, the following command line can be used in conjunction with an Active Directory GPO, script or 3rd party deployment software. It is based upon the default installation path.

```
msiexec /x "C:\<installation path>\WorkspaceDiscoveryAgent.msi"
```
FIRST USE

Overview

Upon starting the Workspace Discovery console, the home screen displays summary statistics of agents which have registered themselves with the server, and of those which have registered, which ones have completed their initial scan. This screen can be accessed at any time via the File → Discovery Status menu.

Deployed agents will make initial contact and register with the Discovery Server up to an hour after initial deployment. An initial scan will be performed after registration and raw data is uploaded to the server. Ongoing monitoring of application usage will continue, and data is uploaded to the Discovery Server on an automated schedule.

Please refer to the Discovery User Guide for further information and configuration options.
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