

Centralis Harvester



Quick Start Guide

By

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1. Introduction

Centralis developed Harvester based on ten years direct experience of managing and supporting corporate Citrix server farms.

With Centralis Harvester, Citrix administrators are given access for the first time to a published application management tool which operates at the farm level, making global changes simple and easy to carry out.

This allows Citrix administrators to quickly and easily carry out core farm administration tasks in a fraction of the time, including:

- Reporting and changing settings for published applications across the farm
- Publishing standard lists of applications to a new server
- Stopping the publishing an application across every server in the farm
- Reporting and changing server configuration settings across the farm
- Storing server configurations in a file to be compared with and applied to other servers

These may be simple farm management tasks for small-scale deployments of Citrix MetaFrame, but once you have to manage more than a handful of servers and applications, these activities become time consuming and repetitive. Maintaining accurate standards is essential to effective farm management, as even small differences in settings on different servers or published applications can compromise service delivery.

Harvester has been designed to have the maximum benefit for your environment, but also to require the minimum installation and risk.

Specifically Harvester:

- can be run as an executable, with no install required
- does not make any registry changes
- does not require any files other than the executable and Help file
- does not write directly to your Citrix servers or the IMA database itself
- only uses functions or operations which are fully supported by Citrix through their SDK

2. Installation

2.1. Downloads

Harvester is available either directly from Centralis, or as downloads from the Centralis website at www.centralis.co.uk/downloads:

You will be prompted for your contact details. It is important that these are entered correctly, as your email address will be used to send out your license file.

2.2. Licenses

Evaluation licenses will be sent out by Centralis to the email address given on the download registration form. Evaluation licenses are fully featured, but permit only two servers and eight published applications to be displayed in Harvester.

Commercial licenses are issued in packs, each licensing up to five servers and up to 20 published applications. License packs are additive, allowing any number of Servers and Published Applications to be managed, and discounts are available for volume purchases. More information on licensing and pricing is available from the Centralis website (www.centralis.co.uk) or by emailing sales@centralis.co.uk.

If you have purchased an upgrade to your existing licence (either to add more servers, add more published applications or to upgrade from an evaluation licence to a commercial one) you can do so from within Harvester via the Licence Details option on the Harvester Help menu.

2.3. Options

Once the software has been downloaded, you can choose to run it either on a Citrix server or onto a LAN connected PC. The options for each are outlined below.

Please note that the only action carried out by the install program is to copy the Harvester executable file and help file into the target directory on the MetaFrame Server or PC – no additional DLL's are copied or registry changes made.

Harvester can therefore be run on one of your MetaFrame servers without affecting your standard build or the application set already installed, and no post-implementation configuration is required, other than setting up a published application to launch the software.

Where Harvester is installed on a PC, some post-installation changes may be needed to allow connection to the Citrix MetaFrame farm. These changes are detailed in the section Running Harvester Remotely (below).

Options	Description	Requirements	Benefits
Locally	Harvester can be run as a Citrix published application	Citrix Presentation Server 4.0 or above Windows 2000 / 2003 server	Simple to set up
Remotely	Harvester can be installed onto a PC, and run remotely from the Citrix server farm	Citrix Presentation Server 4.0 or above Windows 2000 / XP / 2003 server	No change to the Citrix servers

Installation options

2.4. Installing & Running Harvester Locally

Installation is carried out simply by copying the Harvester .EXE and help files onto a server. Copying the files can be carried out manually, or by running the MSI based install. Once the files are copied to the server, simply set up a Published Application to launch Harvester.

Running Harvester locally requires no configuration, however please ensure that the user session you are running Harvester under is a Citrix Administrator in the farm.

2.5. Installing & Running Harvester Remotely

To manage Published Applications and Servers from a PC, Harvester requires access to a DCOM server called MFCOM which enables communication with the Citrix Farm datastore. If you are running Harvester on a MetaFrame server, this is already available, but on a PC some configuration changes are required.

These are:

- Ensure that the machine you wish to run Harvester on has network access to the Presentation Server (e.g. using the command line utility *ping*)
- Register MFCOM using the *mfreg.exe* command line utility
- Configure MFCOM access permissions

Registering MFCOM remotely

To register MFCOM for remote access to a Citrix Presentation Server in the farm, use the utility *MFREG.EXE*. Ensure that the version of *mfreg.exe* corresponds to the version of Presentation you are connecting to by copying it from the Presentation Server (e.g. *c:\Program Files\Citrix\System32*) to the Windows System32 directory on the machine you wish to run Harvester (e.g. *c:\windows\system32*). Harvester will not run if these versions are different. Run *mfreg.exe servername* from a command prompt, where *servername* is the name of the Presentation Server on which MFCOM will be running.

It is also important that the specified Server name can be resolved. You can do this by entering both the Server name and its IP Address into the hosts file (e.g. *C:\WINDOWS\system32\drivers\etc\hosts*) on the machine you wish to run Harvester on.

If you have a previous version of MFCOM registered you must un-register this prior to registering the newer version of MFCOM. To un-register MFCOM run *MFREG /u* at a command prompt using the old version of *MFREG.EXE*, then register the new MFCOM using the new *MFREG.EXE* file.

Configuring MFCOM Access Permission

MFCOM is a DCOM Server which runs on Citrix Presentation Servers. Applications can connect to an MFCOM Server remotely and communicate with the Farm datastore. MFCOM uses the impersonation mechanism to implement access security. To enable access to MFCOM, the default impersonation level must be set to Impersonate. To configure the default impersonation level, use *DCOMCNFG*, a tool provided by Microsoft for configuring COM related registry settings. Use the following steps to set the default impersonation level:

1. Run *DCOMCNFG.EXE* at a command prompt.
2. If you are running Windows XP or Windows 2003 Server click on Component Services then Computers and then right click on My Computer and select Properties.
3. Click the Default Properties tab and select Impersonate from the drop-down list below the label "Default Impersonation Level".
4. Click OK, then restart the system to pick up the changes

When you run Harvester remotely, your user details are passed to the Citrix Presentation Server you are connecting to. The user details must be able to be authenticated by DCOM. This can be achieved if either

- a) the Server is in the same domain or trusted domain as the connecting user or
- b) the Server has a local user of the same user name and password.

Once your user details have been authenticated by DCOM, Harvester will then check that you are a Citrix Administrator. (Harvester will not start if you are not a Citrix Administrator)

3. Getting Started with Harvester

This section will take you through the first steps of using Harvester to manage your Citrix environment. It follows steps required to complete some typical farm management tasks to get you used to the Harvester interface and commands.

Please note that there are a number of toolbar, menu and keyboard options available for the commonly used tasks. This guide assumes use of the mouse commands as default. The Harvester Help file contains more details of alternative commands.

Please also note that if you are using the evaluation license you will be limited to viewing two Servers and eight Published Applications.

The tasks covered in this section are:

Removing & restoring published applications from a server

- Creating an application list for the server
- Stopping the published applications
- Restoring the published applications

Checking and standardising published application settings

- Finding the attribute settings across all published applications
- Setting the attribute to standard

Removing and restoring published applications from a farm

- Creating an application list for the server
- Stopping the published applications
- Restoring the published applications

Checking and standardising Server settings

- Creating a standard server file
- Comparing a server with the standard
- Setting the server to the standard

Creating and using Standard Server Configuration Files

- Creating a standard server configuration file
- Comparing a server with the standard configuration file
- Loading a standard configuration file

3.1. Removing & restoring all the Published Applications from a Server

This procedure will remove and then restore all the Published Application from a single server in a Citrix farm. Note that if a subset of applications is selected, only the selected Published Application will be removed from the Server.

1. Select the Server in the left hand pane.
2. The Published Applications for that Server will be displayed in the right hand pane.
3. Click on a Published Application in the right hand pane, and press **Control & A** to select all the Published Applications, then Right-click and select the menu option **Remove...**
4. Enter a filename to save the list of "removed" applications to an XML file (Saving the Applications to an XML file allows them to be restored at a later date.)
5. Click **Next** to view the confirmation screen, then click **Next** to remove the applications.
6. Click **Finish** to close the wizard

To restore all the Published Applications:

1. Select the Server in the left hand pane, then Right-click on the (empty) right hand pane, right click and select the menu option **Add...**
2. Select the XML file you saved earlier and a list of all the previously published applications will be displayed. Use the ">>" button to add all the applications to the Server,
3. Click **Next** to action, then **Next** to confirm
4. Click **Finish** to close the wizard

3.2. Checking and standardising Published Application settings

This procedure will check and standardise the settings for all the Published Applications in a Citrix farm. Note that if a subset of Published Applications is selected, the Published Application settings will only be checked and standardised on the selected servers.

1. Go to the **View** menu, and deselect the Folders option
2. Select the top level Application folder (Applications all) in the left hand pane, which will display all the Published Applications in the right hand pane
3. Click on a Published Application in the right hand pane, then use **Control & A** to select all the Published Applications
4. Right click and select **Report Attribute**
5. You will then be given the option of which categories of information to view (note that if you have included Published Content items, indicated by green application icons, this will limit the categories you can view)
6. Select a category (e.g. Application Appearance), then **Finish**
7. Harvester will display the settings for all attributes within that category for all the Published Applications

Making changes to all Published Applications in the Farm

1. Click on a Published Application in the right hand pane, then use **Control & A** to select all the Published Applications
2. Right click and select **Set Attribute**
3. You will then be given the option of which categories and settings are available (note that if you have included Published Content items, indicated by green icons, this will limit the categories you can view)
4. Select a category and attribute (e.g. Application Appearance & Colours), then **Next**.
5. Harvester will display the available options for the selected attribute.
6. Choose the setting/s you want to make standard, then select **Next**.
7. Harvester will confirm which Published Applications will be updated.
8. Click **Finish** to close the Wizard

3.3. Removing and restoring a Published Application from a Farm

This procedure will remove and then restore a Published Application from all the servers in a Citrix farm. Note that if a subset of servers is selected, the Published Application will only be removed from the selected servers.

1. Select the Published Application in the left hand pane.
2. The Servers publishing the Application will be displayed in the right hand pane.
3. Click on a Server in the right hand pane, and press **Control & A** to select all the servers.
4. Right-click and select the menu option **Remove...**
5. Enter a file name to save the Server list to, (Saving the Servers to an XML file allows them to be restored at a later date.)
6. Click **Next** to view the confirmation screen, then click **Next** to remove the Application from the Servers.
7. Click **Finish** to close the wizard

To restore the Published Application:

1. Select the Published Application in the left hand pane.
2. Right-click on the (empty) right hand pane, right click and select the menu option **Add...**
3. Navigate to and select the XML file you saved earlier
4. A list of all the Servers which previously published applications will be displayed
5. Use the ">>" button to add the Published Application to all the servers
6. Click **Next** to proceed, then Click **Next** to confirm
7. Click **Finish** to close the wizard

3.4. Checking and standardising Server settings

This procedure will check and standardise the settings for all the Servers in a Citrix farm. Note that if a subset of Servers is selected, the settings will only be standardised on the selected Servers.

1. Select the top level Servers folder (Servers all) in the left hand pane, which will display all the Servers in the right hand pane
2. Click on a Server in the right hand pane, then use **Control & A** to select all the Servers
3. Right click and select **Report Attribute**
4. You will then be given the option of which categories of information to view
5. Select a category (e.g. ICA Keep Alive), then **Finish**.
6. Harvester will display the settings for all attributes within that category for all the Servers

Making changes to all Servers in the Farm

1. Click on a Server in the right hand pane, then use **Control & A** to select all the Servers
2. Right click and select **Set Attribute**
3. You will then be given the option of which categories and settings are available
4. Select a category and attribute (e.g. ICA Display, ICA Display Settings), then **Next**.
5. Harvester will display the available options for the selected attribute.
6. Choose the setting/s you want to make standard, then select **Next**.
7. Harvester will confirm which Servers will be updated, select **Next**.
8. Click **Finish** to close the wizard

3.5. Creating and using standard Server configuration files

This procedure will create a file of standard MetaFrame settings which can be loaded onto a new server, or compared with existing builds to enforce standards across the farm.

1. Determine which server you want to use as a best practice reference server.
2. Select the Server in the left hand pane, right click and select **Save Configuration**
3. You will then be given the opportunity to enter a filename, and basic documentation (e.g. created by, comments etc.)
4. The server settings and comments are then saved to the file.

Comparing a Server with the saved file

1. Click on a Server in the left hand pane, right click and select **Compare Configuration with XML File...**
2. You will then be given the option to select which file to use for comparison.
3. Select **Next**, and you will be presented with a report of differences between the two.

Loading a saved file onto a Server

1. Click on a Server in the left hand pane, right click and select **Load Configuration File...**
2. You will then be given the option to select which file to load
3. Select **Next**, and you will be presented with a report of differences between the two, with the option of which attributes you wish to set to standard (and what that new attribute setting will be).
4. Select the attributes you wish to update and click **Next**
5. You will be asked to confirm the operation
6. If you are happy to proceed with the change, click **Yes** to update the server, then **Finish** to close the wizard.

4. Using Harvester to support your Users

This section looks at some typical support tasks and Citrix MetaFrame support issues, and the ways to use Harvester as a support tool to resolve them and improve the service to end-users.

Requirement	Issue / Probable Cause	Harvester Resolution
Users sometimes get a different experience (e.g. Windows size or colour depth) when they log in.	Settings are not consistent across all the Published Applications in the Farm	Use Harvester to check and then standardise the set of Published Application settings in one operation
I need to remove the servers one by one from the farm to apply an update, but it takes too long	Using the CMC to remove Published Applications from each server, then restoring them is a time consuming, manual task	Harvester can save each Servers' Published Applications to a list, un-publish and then restore them in seconds
I use Application Silos. How can I quickly load the right server configuration and applications for each silo?	Maintaining detailed information on different application groups and server configurations is complex and time consuming.	Use Harvester to quickly store and apply standard Published Application lists and Server configuration files.
Some applications do not session share correctly with the others	Load balancing can be compromised by some Published Application settings	Use Harvester to check and standardise the Published Application settings
I have a large number of Published Applications and sometimes forget to add all the applications to a new server.	Maintaining standard application lists, and applying them to servers, is a time consuming, manual task	Harvester can store your standard set of Published Applications, and apply them all to the server for you
I have a large number of applications and servers, and need to maintain detailed logs of changes and settings to ensure quality and standards	Keeping records of all settings is very time consuming, and checking configurations against manual records is far too slow	Use Harvester to define and apply standards across Applications and Servers
When I add a new server to the farm, I have a long checklist of settings that need to be changed.	Documenting server configuration is time consuming, and following the documentation is open to error	Harvester can store the full set of server configuration settings in one configuration file, and load these onto the new server
I have several hundred Servers in my Farm. How do I check that they are all configured correctly for a particular attribute	Checking the setting means opening each Server in the CMC, accessing the tab with the attribute and recording it.	Use Harvester to report on the attribute setting across every Server in one operation.
I want to change a MetaFrame configuration setting on every server in the farm, and make sure that it is completely standard	Making changes manually is time consuming and prone to error – and checking for errors takes as long as making the change!	Use Harvester to check and standardise Server settings
Troubleshooting a fault means finding all the servers which have a particular attribute setting	Reporting on settings for every server is not possible, and recording the information manually is often too slow.	Harvester can quickly check each Server against your standard settings
Updated Best Practices demand a different level of security for all my Published Applications	Changing critical settings means opening and manually updating each Published Application in the CMC	Use Harvester to change the security setting for all your Published Applications in one operation
Under our Service Level Agreement, we have to report on our compliance with standard builds and settings.	Analysing and reporting standards compliance is so time consuming as to be almost impossible.	Use Harvester to report on standards across Applications and Servers