Deployment Document

Deployment of

**IPLookup Data Store**



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Revision History

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# Scope

This document is covers installation steps of Data Store for IPLookup feature.

# Overview

* IPLookup data store will be at the front end and will in the form of Flat-File.
* This data store will be Interception function specific and will be distributed over various CPS within the IF.
* All Mavens corresponding to a CPS will be writing flat files at a common location and this common location, this location will be remote-shared.
* In an IF the CPS having FM service will also host an FTP server.
* The FTP server will provide access to CPS specific shared-folder by means of mapped-virtual-folders.
* Back-End will interact with the data store via the FTP-Server and will be responsible for downloading and deleting the flat-files.

## Sample Schematic Diagram

This is just a reference setup.



# Automatic-Installation

This section is for IIS-FTP Automation intended for IPLookup. Automatic-installation utility should be executed per IF-FE basis and should be executed on CPS where FTP Server has to be installed (Same Machine where RM service is there).

It does following things.

* Install ftp server, create FTP site, map virtual directories and grant necessary permissions.
* Create required folders on local and remote machines (CPS).

***NOTE:*** This utility will not change Maven configuration that has to be done explicitly.

## Installation Information

No installer needed. Copy and paste the Folder to any desired place.

## Prerequisites

Following prerequisites are required to run this utility

1. The machine on which script will be installed MUST have .NET framework 2.0 and Windows Server 2003 SP2 or more
2. Usernames and passwords for all the CPS should be same and should be entered in config file beforehand
3. Users should have administrative access to the machine.
4. Script shall be executed by and administrator only.
5. Firewall on all cps should be OFF
6. IIS should be already installed on machine where this script is to be executed
7. I386 folder of Windows 2K3 should be directly accessible from the machine where script will be executed
8. HOST NAME of all the machines should be known
9. IP address of the FTP server machine should be known
10. Any FTP site should not be running on the machine
11. There should be NO spaces in any directory path or DUMP Folder name
12. Domain user names should not be used
13. Any other folder should not be shared on any one the machine with the name same as DUMP\_FOLDER\_NAME's value
14. FTP\_BASE\_PATH directory should NOT be present; script will create it by itself along with the folders requited for virtual directory.
15. Execution of either vbscript or PowerShell should not be blocked on the machine.
16. For every CPS, Validate that there is required Disk Space as per IPLookup feature.

## Limitation

1. Any of the path names **shall not contain spaces in** **between** (paths with spaces is not supported by certain APIs of windows, even with quotes)

## Configuration Information

Location of Config.ini file should be in the script folder only Details of the configuration file is described bellow

|  |  |
| --- | --- |
| **Configuration (with Sample)** | **Description** |
| [GENERAL] |  |
| ENABLE\_SETUP\_INSTALL = 1 | To enable or disable FTP server installation |
| ENABLE\_USER\_FOLDER\_CREATION=1 | To enable or disable dump folder creation and sharing on remote machines |
| ENABLE\_FTP\_SITE = 1 | To enable or disable FTP site creation and management |
| USER\_NAME = admin | Common user name present on all machine(CPS) [Administrator level] |
| PASSWORD = passwrd | Common password present on all machine(CPS) [Administrator level] |
| DUMP\_FOLDER\_NAME = CPS | Common name of folder used for dumping data also the share name of dump folder |
| I386\_PATH = \\192.168.50.228\WS2K3\ | Shared Windows 2K3 I386 folder for FTP server installation, This location should be accessible directly. |
|  |  |
| [FTP\_SITE] |  |
| CPS\_NAME = CT-N0060 | HOST name of CPS where FTP server will be installed |
| DUMP\_FOLDER\_PATH = D:\CPS0 | Dump folder path on this particular machine. It’s the place where DUMP\_FOLDER with name of DUMP\_FOLDER\_NAME will be created and final path where files will be dumped will be <DUMP\_FOLDER\_PATH>\< DUMP\_FOLDER\_NAME>. And the folder < DUMP\_FOLDER\_NAME> will be share name of this folder. |
| FTP\_BASE\_PATH = D:\IPLOOKUP\FTPBase | FTP site base path, It will be base directory of FTP server |
| FTP\_SITE\_NAME = IPLOOKUP\_FTP | Name of FTP site |
| IPADDRESS = 192.168.129.136 | IP address of CPS where FTP server will be hosted |
| OVERWRITE\_DEFAULT\_SITE = 1 | IF default site is already present then setting the value as 1 will delete the default site |
|  |  |
| [CPS\_INFO] |  |
| NUMBER\_OF\_CPS = 2 | Number of CPS's **other than the one where ftp** server will be installed |
|  |  |
| [CPS\_0] | Nomenclature should be like [CPS\_<cps count from 0>] |
| CPS\_NAME = CT-D063 | HOST NAME of CPS |
| DUMP\_FOLDER\_PATH = E:\CPS0 | Dump folder path on this particular machine |
|  |  |
| [CPS\_1] |  |
| CPS\_NAME = CT-D012 |  |
| DUMP\_FOLDER\_PATH = F:\CPS1 | Dump folder path on this particular machine |

**Recommendation**: **Don’t create dump folders under the FTP\_BASE\_PATH.**

**Note: NUMBER\_OF\_CPS in [CPS\_INFO] is the total number of CPS on remote machines. i.e. Excluding the one with FTP server**

## Maven Configuration Information

Following is the sample of maven config in context of Iplookup

|  |  |
| --- | --- |
| **Configuration (with Sample)** | **Description** |
| [DSSSection] |  |
| DSSPath=C:\CPS2\cps | Complete path where maven will dump .pcap files at their respective paths. It consists of <DUMP\_FOLDER\_PATH>\< DUMP\_FOLDER\_NAME> for config.ini |
| DSSLimit=5120 |  |
| FTPBasePath=CT-ALPHA | <MACHINE-NAME> hear CT-ALPHA is machine name where maven is installed |

## Execution Information

Make changes in the **Config.ini** file and execute **IPLOOKUP\_Master.vbs** for complete installation as per below mentioned steps. (**DONT** execute individual scripts for iis installation, folder creation, and ftp site creation directly).

### Script Execution Guidelines

Following are the steps for executing the script successfully.

### STEPS:

1. Make sure all the pre-requisites are fulfilled and limitation are been taken care of.
2. Configure "Config.ini" with proper information.
   * Enable "ENABLE\_SETUP\_INSTALL" in config file if you want to install ftp server or IIS server only.
   * Enable "ENABLE\_USER\_FOLDER\_CREATION" in config file if you want to create folders on remote machines only.
   * Enable "ENABLE\_FTP\_SITE" in config file if you want to manage FTP Site only. (make sure all other steps are full-filled if you are activating partial scripts)
   * Configure rest parameters.
3. Now execute ***IPLOOKUP\_MASTER.vbs*** (Consider you are doing complete configuration i.e. all three are enabled)
4. Internally, First IIS\_Install.vbs script will be executed. IF you get Dialog Box asking for I386 path then make sure I386 path mentioned in configuration is correct and accessible. Make default choices to continue with installation.

**NOTE**:- In some cases while installing FTP server you might get prompted for address of I386 folder. When default choice to continue is selected in that case, sometimes wizard may not continue then verify the accessibility of I386 folder from the machine where this script is executed.

1. After IIS/FTP installation is complete script for folder creation on remote machines is executed. This script created a folder or remote machine and shares it with a name provided in configuration file. IF any failure logs are generated (ping failure /folder creation/ folder sharing [error code 22] ) then script will continue with folder creation for other machines and the task (whatever failed) can be re-tried with task-individual script (Consult for same) or can be done manually (RECOMMENDED).
2. After remote folder creation is successful, FTP site management will be initiated. If any other FTP site is present then this script will stop. This script will first create folders on remote machine for data dumping and ftp base path and sub paths, then it will create FTP site and further it will create virtual directories in the FTP site and will map them to remote paths on machines provided in the configuration file. IF any of the step fails then the task (whatever failed) shall be re-tried by script or done manually (RECOMMENDED)
3. After this execution of script has ended. Check the PRORESSlog.txt for progress related information.

## Logging Information

Logs will be generated in the same folder where script is present

There are 2 log files:

1. **Log.txt** contains all debug logs and notification logs
2. **ProgressLog.txt** contains the progress information of the script.

**NOTE: Intermediate on screen logs like FTP Server Installation Complete, Folder Creation Complete etc. will appear on screen (in a window) at the first time of execution and form second time onwards same messages can be observed on console.**

### Error Levels

There are TWO levels of errors observed in the script, **critical** and **non-critical**

#### **CRITICAL Errors**:

Critical errors are those errors which stop the script from further execution. Errors which are classified as critical errors are

1. CRITICAL\_INVALID\_OPERATING\_SYSTEM\_FOUND
2. CRITICAL\_ERROR ERROR\_READING\_CONFIG\_FILE
3. CRITICAL\_FTP\_SERVICE\_IS\_ALREADY\_RUNNING
4. CRITICAL\_CREATING\_FOLDER\_FAILURE\_CreateBasePathDirectory\_
5. CRITICAL\_DEFAULT\_FTP\_SITE\_EXISTING\_OVERWRITE\_DEFAULT\_SITE\_DISABLED
6. CRITICAL\_CREATING\_SITE\_FAILURE

NON-CRITICAL Errors:

These errors appear in case some command failed but script can continue executing its task. Errors which are classified as non-critical errors are

1. FOLDER\_CREATION\_AND\_SHARING\_FAILURE
2. MACHINE\_NOT\_AVAILABLE\_PING\_FAILURE
3. FOLDER\_SHAIRING\_FAILED
4. NOTIFICATION CREATING\_VIRTUAL\_DIRECTORY\_FAILURE. Etc.

# Manual Data Store Deployment

Deployment of data store depends on whether this machine will host FTP server or not. **There will be only one machine hosting FTP Server in one Interception function**.

## Deployment on CPS Hosting FTP Server

### Prerequisite

Following are the prerequisites of the Data-Store Deployment (i.e. Flat-File storage and FTP)

* Windows Server 2003 OS.
* Necessary Disk Space.
* IIS 6.0.
* CD or Folder Location containing contents of Windows Server 2003 (I386).

### Manual -Installation

We need to install FTP in IIS 6.0 of machine, follow steps below:

* Go to “Control Panel -> ADD/Remove Program -> Add/Remove Windows Component -> Application Server -> IIS -> FTP”
* Select “FTP”. And proceed for installation.
* During installation, installer might ask for CD or location (network or local) containing contents of OS (Windows Server 2003). Provide the same.
* Rest installation will get completed successfully within few minutes.

### Configuration

#### Create User

* Click on your start menu, control panel, administrative tools, and computer management.
* Expand Local Users and Groups, right click on Users and click on New User.
* Now just fill in the information username as ctadmin and password as ctadmin, select check box "User cannot change password" and "Password never expires" and click ok.
* Create a local folder <folder\_name> in which FTP files will be dumped.
* Now you will need to give the user permissions for the folder <folder\_name>.

#### Grant Permission

* Right click on <folder\_name> and click on properties, then navigate to the security tab and click on the Add button.
* Now you can simply type in the name of the user ctadmin (format : “<machine-name>\ctadmin”) and click ok. Then Give full control permissions below after you add the user.
* Click once on apply, and then click ok.

### Create FTP Site

For IPLookup data, only one machine will have FTP Site. This FTP site will add shared folders (containing IPLookup data) of other machine, as Virtual Directory, as mentioned below.

* Open IIS Manager (“Control Panel -> Administrative Tools -> IIS Manager”).
* Add FTP Site, “FTP Sites -> New -> FTP Site”. In this process you will need to provide IP address of machine and a home directory for this site.
* Add Virtual directories to newly created ftp site. Virtual directory creation requires three things “alias name”, “Physical location” and “Authentication”.

1. Alias Name: It’s the name through which FTP clients will recognize this directory.
2. Physical Location: It is the actual location of directory. It is taken as “Path” in the process. It can be local or remote.
3. Authentication: Authentication is supplied by providing account information (User ID and Password) in “VirDir -> Properties -> Virtual Directory (tab) -> Connect As”.

* Create directory (in Home Directory) of same name as alias of virtual directory. This is a workaround for a bug found in IIS6.0. (For more info <http://support.microsoft.com/kb/142853>).
* Add as many virtual directories as you want, in the same manner.

## Deployment on CPS NOT Hosting FTP Server

### Prerequisite

Following are the prerequisites of the Data-Store Deployment (i.e. Flat-File storage and FTP)

* Windows Server 2003 OS.
* Necessary Disk Space.

### Installation

No installation needed.

### Configuration

#### Create User

* Click on your start menu, control panel, administrative tools, and computer management.
* Expand Local Users and Groups, right click on Users and click on New User.
* Now just fill in the information username as ctadmin and password as ctadmin, select check box "User cannot change password" and "Password never expires" and click ok.
* Create a local folder <folder\_name> in which FTP files will be dumped.
* Now you will need to give the user permissions for the folder <folder\_name>.

#### Grant Permission

* Right click on <folder\_name> and click on properties, then navigate to the share tab and share the folder.
* After sharing navigate to Permissions, and then click on Add button.
* Now you can simply type in the name of the user ctadmin (format : “<machine-name>\ctadmin”) and click ok. Then Give full control permissions below after you add the user.
* Click once on apply, and then click ok.