

Supplement #26

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CONFIGURING TURNOVER® FOR ISERIES FOR DIRECT FTP DISTRIBUTION

This document describes how to set up and configure TURNOVER® for iSeries for direct FTP distribution to a target computer. It also describes some common problems you might experience during setup and testing, as well as how to recover objects to the target server in the event of a post-distribution problem or mid-job failure.

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INTRODUCTION

TURNOVER® for iSeries can transfer IFS¹ objects directly to another computer during the course of a typical TURNOVER® for iSeries promotion. To use this feature, your TURNOVER® for iSeries application must be configured to run a distribution job that connects to the target computer and transfers files using either the standard file transfer protocol (FTP) OR the secure file transfer protocol (SFTP) over the Secure Shell (SSH) protocol. This capability is called *direct FTP distribution*.

With this feature, TURNOVER® for iSeries can support any platform that can run FTP server. This includes Web servers outside the corporate firewall that are accessible only with FTP, as well as non-IBM i platforms that an IBM i system cannot “talk” to any other way.

IMPORTANT!

1. Do not confuse direct FTP distribution with TURNOVER® for iSeries’ *FTP alternate distribution method, which uses FTP over a TCP/IP network (as opposed to standard file transmission over a *SNADS network) to send IBM i or IFS objects on a form from one IBM i system to others in your internal network.
 2. **Before you begin:** This feature applies only to IFS objects, which you manage using IFS type codes (*IFSOBJ), and which you can only configure using the TURNOVER® for iSeries Client or plug-ins.² If you are thinking of using this feature, you should have a working knowledge of how to manage IFS objects with TURNOVER® for iSeries and be familiar with the TURNOVER® for iSeries Client software. For more information, see the *Managing IFS Objects Using TURNOVER® for iSeries* guide and the TURNOVER® for iSeries Client online Help.
 3. If the system variable named QCRTAUT is set to *USE on your system, make sure the user profile(s) you are using for FTP distributions have explicit authority to the SOFTTURN library or to the location where you have loaded the primary TURNOVER® for iSeries objects.
-

Setting up for direct FTP distribution requires configuration at the system, application, and type code levels of TURNOVER® for iSeries, to control the commands issued at these three levels during direct FTP distribution. These configurations are described in this supplement.

¹ An *IFS object* is any file that is accessible through the Integrated File System of your IBM i system. This definition encompasses not only files that reside in folders on the IBM i system itself, but also files that reside in folders on a network PC that your IBM i has been configured to access. For information about configuring your IBM i system to access files on a network PC through the Integrated File System, see the *Managing IFS Objects Using TURNOVER® for iSeries* guide. This guide is available in PDF form on your TURNOVER® for iSeries product CD.

² Some configuration information for this feature is visible in the 5250 TURNOVER® for iSeries user interface, such as the system definition and its distribution defaults. However, you cannot enter or change, in that interface, the FTP command information described in this supplement.

CREATING A TURNOVER® FOR ISERIES SYSTEM DEFINITION FOR THE TARGET SERVER

TURNOVER® for iSeries connects to the server computer using access information that you provide in a TURNOVER® for iSeries *system definition*.

Access information you need to supply

Before you create a TURNOVER® for iSeries system definition, you need the following information about the target computer you plan to access:

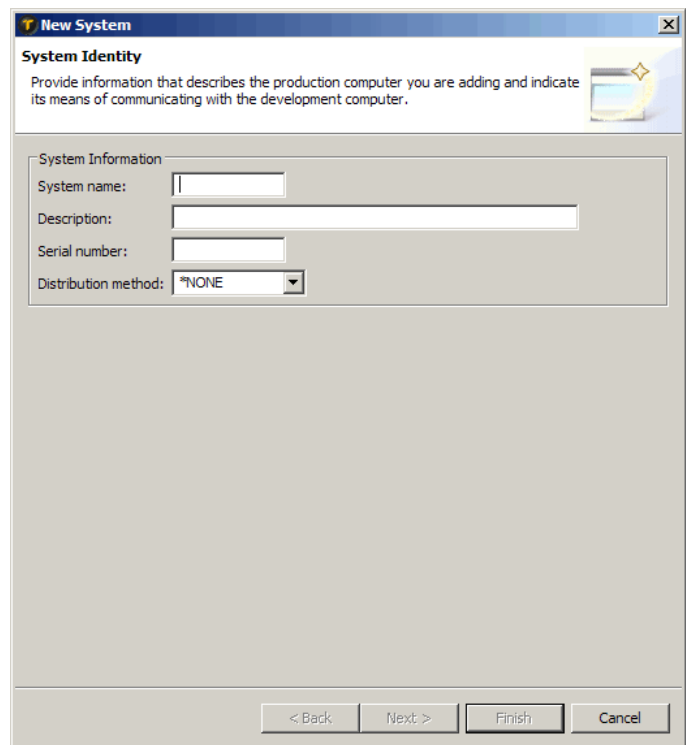
- The target computer's host name or IP address.
- A valid user name for accessing the target computer.
- A valid password for accessing the target computer.
- Commands you might need to execute once you have connected to the target computer. (For details about adding FTP commands, see *Defining FTP server commands* on page 6.)

Steps you need to perform

Once you obtain the information that will define the FTP server computer to TURNOVER® for iSeries and allow TURNOVER® for iSeries to access that computer, you create the TURNOVER® for iSeries system definition. To do so, perform these steps:

1. Start the TURNOVER® for iSeries Client software³.
2. In TURNOVER® for iSeries Explorer view, click the plus sign (+) to the left of  **Administration**.
3. Right click  **Distribution Systems** and choose **New System**.

The **System Identity** page of the **New System** wizard appears.



New System

System Identity

Provide information that describes the production computer you are adding and indicate its means of communicating with the development computer.

System Information

System name:

Description:

Serial number:

Distribution method:

< Back Next > Finish Cancel

4. Supply a system name and system description (a serial number (does not apply for FTP distribution), and specify a distribution method of *IFSFTP. (In the **Distribution method** field, choose ***IFSFTP** from the drop-down list.)

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5. Click **Next**.

The **TCP/IP Method Details** page appears.

6. On the **TCP/IP Method Details** page, you supply access information for the target computer. You must supply a host system name or IP address for the computer, as well as a user name and a confirmed password that are valid on that system.

7. Click **Next**.

The **Send Defaults** page appears.

New System
Send Defaults
Indicate your choices for the distribution job.

Send Options

- ☐ Distribute source
- ☒ Distribute objects
- ☐ Distribute application definition
- ☒ Automatically distribute forms
- ☒ Allow override from sending system

Distribution Job Scheduling

- ☒ Current time
- ☐ Specific time: 12 : 00 : 00 pm

Schedule elapsed action: Submit immediately

Messaging Options

- Submit received forms automatically: No
- Receive logs back: No
- Receive confirmations back: Yes

< Back Next > Finish Cancel

New System
Method Details
Configure the information required by the communications method you've chosen.

TCP/IP Details

Host name or IP address:

User name:

Password:

Retype password to confirm:

To specify a secure FTP location, precede your host name or IP address with "sftp://" as follows:

sftp://host.url.com

< Back Next > Finish Cancel

8. On the **Send Defaults** page, indicate whether you will be distributing source or objects to this system by checking one of the two topmost check boxes. The other fields on this panel that apply to direct FTP distribution are **Automatically distribute forms**, **Allow override from sending system**, **Distribution Job Scheduling (Current time OR Specific time)**, and **Receive confirmations back**. TURNOVER® for iSeries ignores any values you enter for the other fields.

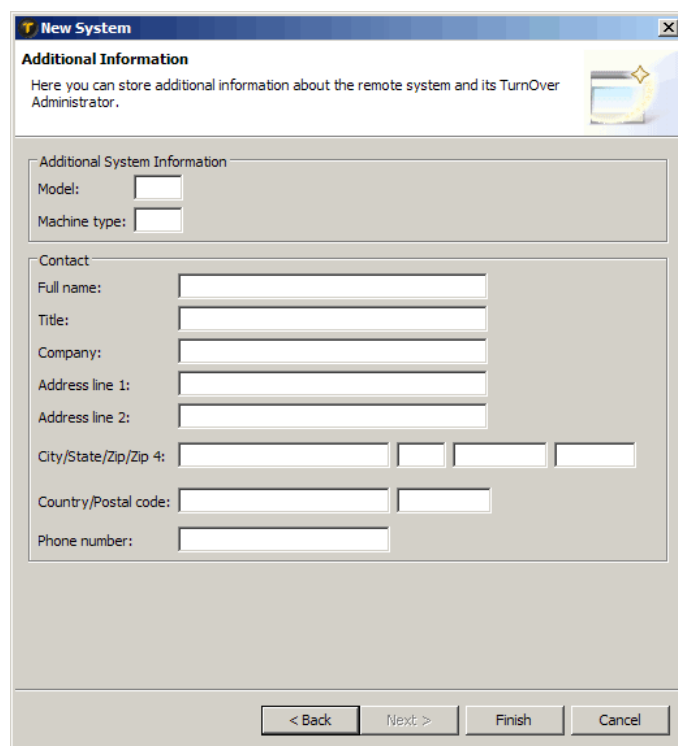
Note: If you want TURNOVER® for iSeries to automatically submit the distribution job, make sure you check the **Automatically distribute forms** box.⁴

³ If your TURNOVER Client components are plugged into WDSC or another Eclipse-based IDE, you can use that application instead of the standalone TURNOVER Client.

⁴ As with any TURNOVER for iSeries distribution, you can choose to submit the job manually using option 2 (**Distribute form**) on the TURNOVER for iSeries Distribution Menu. Leave the **Automatically distribute forms** box unchecked if you will use this approach.

Configuring TURNOVER® for iSeries for Direct FTP Distribution

9. Click **Next**.



The screenshot shows a Windows-style dialog box titled "New System". Inside, there's a section titled "Additional Information" with a sub-header "Here you can store additional information about the remote system and its TurnOver Administrator." Below this, there are two main sections: "Additional System Information" and "Contact". The "Additional System Information" section contains two text boxes labeled "Model:" and "Machine type:". The "Contact" section contains several text boxes for "Full name:", "Title:", "Company:", "Address line 1:", "Address line 2:", "City/State/Zip/Zip 4:", "Country/Postal code:", and "Phone number:". At the bottom of the dialog are four buttons: "< Back", "Next >", "Finish", and "Cancel".

The **Additional System Information** page appears:

10. On the **Additional System Information** page, entries in the **Model** and **Machine type** fields are optional; you can leave them blank. Beneath those fields, supply the name and other contact information of the person responsible for managing or running (or both) TURNOVER® for iSeries forms on the target computer.

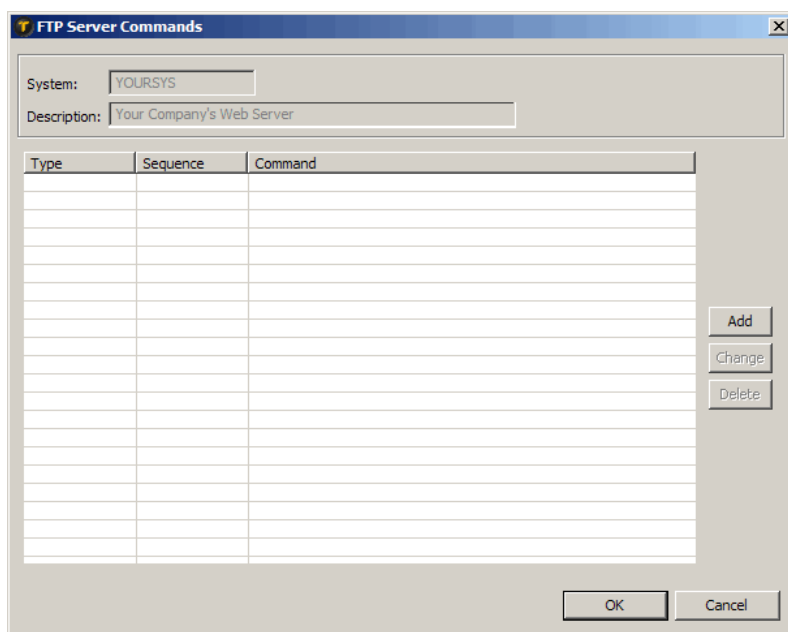
11. Click **Finish**.

You have now successfully defined your target FTP server to TURNOVER® for iSeries and are ready to configure your application definition and its type code(s). However, before you do so, you must

define the FTP server commands for the system (see next).

To define FTP server commands for an existing TURNOVER® for iSeries system definition, perform these steps:

- A panel like this appears:



4. Use the **Add**, **Change**, and **Delete** buttons on the right side of this panel to manage the FTP commands for this system. When you add commands, enter them in the sequence in which you want TURNOVER® for iSeries to execute them. You cannot edit the sequence number in **Change** mode. To change the commands' execution sequence, you must remove and re-add them in the correct order.

1. *Journal of Management Studies*, 1997, 34, 103-117.

[illegible]

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- TURNOVER® for iSeries always uses the system-level commands when distributing to this system from any application.
- TURNOVER® for iSeries executes ***START** commands, in the sequence you have entered them, when it first establishes the connection to the server.
- TURNOVER® for iSeries executes ***END** commands after it processes all the objects and other commands on your form, and before it ends the connection to the server.

CONFIGURING YOUR APPLICATION DISTRIBUTION DEFAULTS FOR *IFSFTP DISTRIBUTION

You can set TURNOVER® for iSeries distribution default values at the system, application, and type code levels. You set up direct FTP distribution in a similar way. In the previous topic, *Creating a TURNOVER® for iSeries System Definition for the Target Server* (beginning on page 3), you set distribution defaults at the system level by creating the system definition for the target computer. In the topics that follow, you will define FTP commands to control what happens on the target computer at the application and type code levels.

Adding the target computer to the application level distribution list

To distribute objects, TURNOVER® for iSeries must know where (to what systems) an application level distributes. In this topic, you will learn how to choose the target computer(s) that you defined in the previous topic as the system(s) to which TURNOVER® for iSeries will distribute objects when your application level form runs.

To access distribution defaults at the application level, perform the following steps:

1. In TURNOVER Explorer view, click the plus sign (+) to the left of  **Applications**.
2. Select the application definition () you want to work with.

Note: Before you can open an application definition for change, you must first check it out. This prevents others from editing it while you are working with it.

3. With the application definition selected, right-click and choose  **Check Out Application**.

When TURNOVER® for iSeries checks out an application definition, it adds a check mark to the application definition icon () and opens the application definition in the graphical Application Designer.

4. In the Application Designer, click on the graphical representation of the application level you want to work with.
5. Right-click and choose  **Level properties**.
6. On the properties panel that appears, click **Distribution** in the list on the panel's left side.

Configuring TURNOVER® for iSeries for Direct FTP Distribution

The **Distribution** properties page appears:

Properties for 20: Production

Distribution

System	Description
YOURSYS	Your Company's Web Server

Add
Change
Delete

OK Cancel

This page lists the systems that are in the distribution list for this application level. Use the buttons on the right side of this page to manage the distribution list for this application level. (When you click the **Add** button, you see a list of all systems defined to TURNOVER® for iSeries. From this list, you can select systems you want to add to the distribution list for this application level.)

UNICOM Systems, Inc. Note

This document describes configuring the application to distribute objects to another computer using direct FTP. Therefore, for this list we would only select systems that use the *IFSFTP method. This does not mean that your application can only distribute PC objects via FTP during this form job; other systems CAN be in the list for this application level, and non-PC objects can be distributed to other systems during the same form run (according to their object type).

Configuring TURNOVER® for iSeries for Direct FTP Distribution

Also, on the **Distribution** properties page, you can remove a system from the distribution list by selecting the system and clicking the **Delete** button. If you select a system and click the **Change** button (or just double-click the system), you will see a panel like this:

YOURSYS IFS FTP Defaults

Level: Production(20)
System: YOURSYS

Application Commands:

Type	Sequence	Command

Add
Change
Delete

Type Codes to Distribute:

Type Code	Target Path

Add
Change
Delete
Commands

OK Cancel

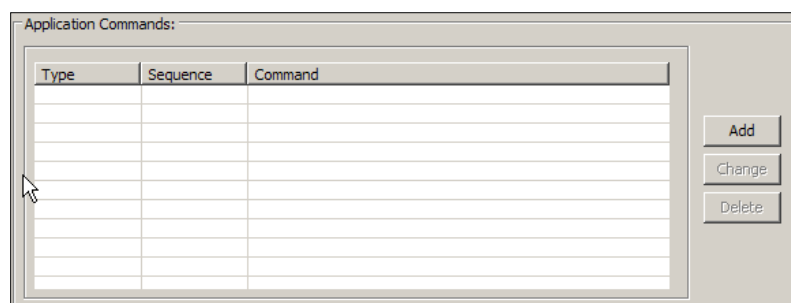
On this **IFS FTP Defaults** panel, you define application- and type-code specific FTP defaults for the system. On this panel, you perform the remaining steps needed to set your TURNOVER® for iSeries distribution defaults at the system, application, and type code levels. These steps (which are described in the following sections) are summarized below:

1. Supply any FTP commands that you want TURNOVER® for iSeries to apply to all objects it distributes for this application level (regardless of object type). For example, you might need to stop the Web server before transferring objects and restart it again afterwards. If this is the case, you would supply a ***START** command that stops the HTTP service and an ***END** command that restarts it afterwards. This step is optional. (See **Defining application-specific FTP commands** on page 11.)
2. Specify which application object type codes you want TURNOVER® for iSeries to distribute to the selected system. (See **Defining distributed application type codes** on page 12.)
3. Supply any FTP commands that you want TURNOVER® for iSeries to execute for each distributed object type. For example, you might want to change the ownership, authority, or attributes of the target object. (See **Defining type code-specific FTP commands** on page 14.)

Defining application-specific FTP commands

Now that you have included the system in this application level's distribution list, you can define FTP commands that you want to execute on the target computer, if applicable, for all objects distributed by this application level.

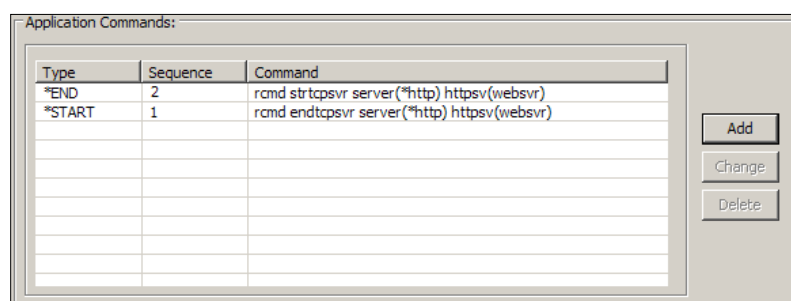
You define application-level FTP commands for the application level in the **Application Commands** area of the **IFS FTP Defaults** panel:



The screenshot shows a window titled "Application Commands:". Inside is a table with three columns: "Type", "Sequence", and "Command". The table is currently empty. To the right of the table are three buttons: "Add", "Change", and "Delete". A mouse cursor is pointing at the first row of the table.

Here, you can use the **Add**, **Change**, and **Delete** buttons to manage the FTP commands you want TURNOVER® for iSeries to execute for this application level. When you add commands, enter them in the sequence in which you want TURNOVER® for iSeries to execute them. You cannot edit the sequence number in **Change** mode. To change the commands' execution sequence, you must remove and re-add them in the correct order.

An example of commands you might want to execute are shown below. You can define commands that will run before objects are transferred (***START**), or after objects are transferred (***END**), or both.



The screenshot shows the same "Application Commands:" window. The table now contains two rows:

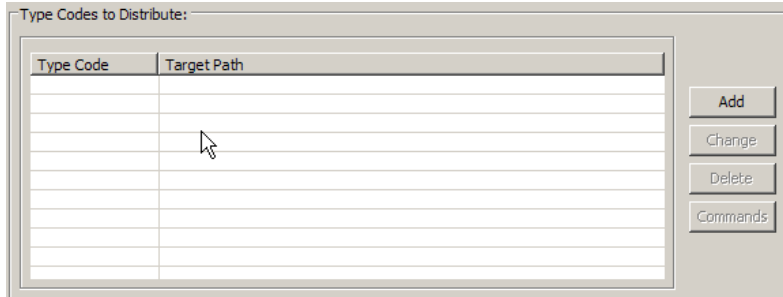
Type	Sequence	Command
*END	2	rcmd strtcpvsvr server(*http) httpsv(websvr)
*START	1	rcmd endtcpvsvr server(*http) httpsv(websvr)

The "Add", "Change", and "Delete" buttons are still present on the right.

Next, you will define application type codes you wanted distributed.

Defining distributed application type codes

You specify, in the **Type Codes to Distribute** area of the **IFS FTP Defaults** panel, which of this application level's IFS type codes you want TURNOVER® for iSeries to distribute to the selected system:



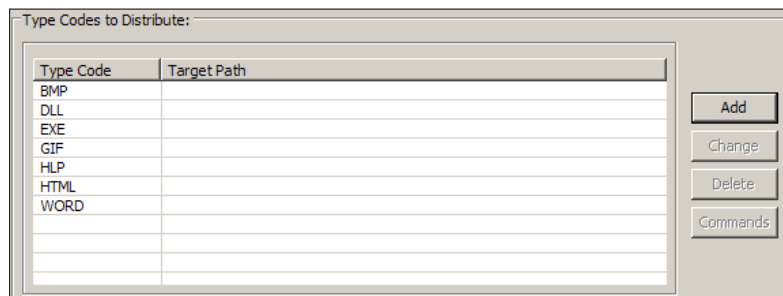
Type Code	Target Path
-----------	-------------

Initially, because you have not yet configured any type codes for FTP distribution, you will not see any type codes.

UNICOM Systems, Inc. Note

Before you can select which type codes you want to distribute, you must include some IFS type codes in your application definition. If you click the **Add** button in the **Type Codes to Distribute** area, and no type codes are available for your selection, you must revisit your application definition and include some IFS type codes there. Then when you click the **Add** button here, the IFS type codes you have specified for the application definition will appear in a **Select Type Codes** pop-up panel. You can then select one or more of them for direct FTP distribution.

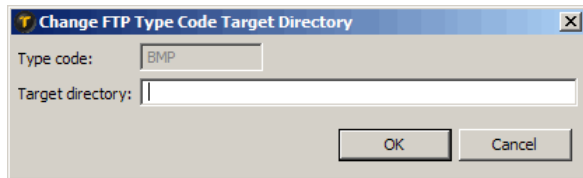
Once you have selected some IFS type codes for direct FTP distribution, they appear as follows:



Type Code	Target Path
BMP	
DLL	
EXE	
GIF	
HLP	
HTML	
WORD	

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You can now use the **Delete** button to remove a type code and use the **Change** button to specify a target library for objects of a particular type. When you select a type code and click **Change**, you see a panel like this:



1. On this panel, type a target directory using appropriate path notation (such as /images) and click **OK**.

The type code is now configured to distribute using direct FTP.

2. Repeat this procedure for each type code you want to configure.

Finally, you use the **Commands** button to define FTP commands for the distributed object types associated with each type code. (For more information about defining type code-specific FTP commands, see page 14.)

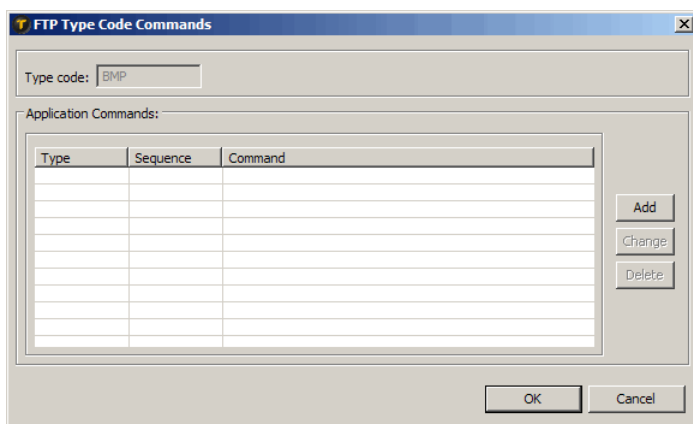
Defining type code-specific FTP commands

Once you have indicated which IFS object types you want your application level to distribute using direct FTP, you can use the **Commands** button to define special FTP processing that should occur before or after files of this type are transmitted. For example, you might want to change the ownership or permissions for all objects of a given type code. You can have TURNOVER® for iSeries execute the appropriate FTP command for this.

To define one or more FTP commands for an object type, perform these steps:

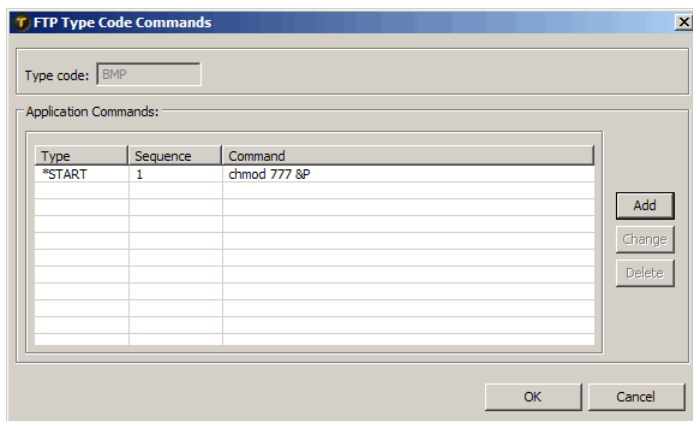
1. Select a type code and click the **Commands** button.

A panel like this appears:



2. Use the buttons on this panel to manage the FTP commands you want TURNOVER® for iSeries to execute for the selected type code. When you add commands, enter them in the sequence in which you want TURNOVER® for iSeries to execute them. If you need to change the commands' execution sequence, you will have to remove and re-add them in the correct order. Also, in the commands, you can use substitution variables for the object's file name (&F) and file name with path (&P).

An example of a command you might want to execute is shown here. You can define commands that run before objects of this type are transferred (***START**), or after objects are transferred (***END**), or both.



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3. When you finish, click **OK** to return to the application level **IFS FTP Defaults** panel; continue to exit out of your application level definition.

You have now configured your TURNOVER® for iSeries application for distributing to another computer using direct FTP. Be sure to test your new configuration by running a sample form containing objects of each type you have configured.

Read on for more information about how direct FTP distribution works, and for information about how to determine whether or not your distribution was successful.

TESTING/TROUBLESHOOTING DIRECT FTP DISTRIBUTION

After a direct FTP distribution, the best way to determine whether all proceeded as planned is to connect to the server using an FTP client, and check the location and file date/time stamps of the objects in question. You can also point your Web browser to the objects and view them to determine whether changed objects have made it to their designated locations.

A direct FTP distribution is like other TURNOVER® for iSeries distribution jobs; it can be automatic or manual, scheduled or immediate, and confirmed.

How direct FTP distribution works

Here is how a fairly typical promotion with automatic direct FTP distribution might proceed:

1. During the form run, the objects on your form are moved to their target location.
2. When the form job finishes its work, it submits the distribution job. Then it spools its job log file and ends.
3. The distribution job gathers the information for the FTP job and submits it; then it waits to hear back from the FTP job. (**Note:** If the distribution job cannot submit the FTP job for some reason, or if the FTP job returns an error, it spools the DISERROR file and its own job log file, and ends abnormally.)
4. The FTP job attempts to connect to the server, and if successful, it proceeds.
5. The FTP job then tries to execute any ***START** commands you have specified – first for the system; then the application level; then for the first type code in sequence. (Any ***START** or ***END** commands you have specified appear in the log.)
6. If the commands are successful, the job continues and FTP commands are executed for each object line of the first type code in sequence on your form. Lines with **Add** or **Replace** action codes result in **PUT** commands; lines with **Delete** action codes result in **DELETE** commands.
7. After all objects for a given type code are processed, ***END** commands for that type code are processed.
8. Steps 5 - 6 are repeated for all remaining distributing IFS type codes on the form, according to sequence.
9. When all objects on the form have been distributed, the FTP job executes any ***END** commands for the application and then for the system, in that order.
10. The FTP job returns normally to the distribution job, which spools its job log and ends normally. Then the FTP job spools the SVRnnnnnn job log file and ends.

During all of this, you might watch the form status progress from **READY** to **SUBMIT** to **RUNNING** to **RAN-OK** to **DIST-PND** to **DISTRIB** to **CONFIRM**.

Finding information about your TURNOVER® for iSeries direct FTP distribution jobs

When testing your newly configured direct FTP setup, you will probably use the TURNOVER® for iSeries WDSC plug-ins to build a form containing objects of each IFS type that is configured to distribute.

Spooled log files are produced during processing. These logs can help you understand what happened if the distribution does not proceed as you expected. They are:

1. **Form job log.** The form job produces a job log spool file (QPJOBLOG) that you can find in the output queue specified by your application definition.
2. **Distribution job log.** The form job spawns a separate distribution job, called DISnnnnnnn, where nnnnnnn is a sequential number. This job always produces a job log spool file (QPJOBLOG) that can help you identify potential errors that may have interfered with your FTP distribution.
3. **Distribution error log.** The distribution job produces a spool file called DISERROR if it was unable to begin or proceed with any distribution.
4. **FTP job log.** The distribution job spawns a job called SVRnnnnnnn, where nnnnnnn is the job number. This job runs the java program that connects to the server and executes the FTP commands you have defined, as well as the **PUT** commands required to transfer the objects. This job logs its activity in a spool file called SRVnnnnnnn.

The presence of this SRVnnnnnnn spool file means that the SVRnnnnnnn job received control. In general, the success or failure of any subsequent processing is noted in the SVRnnnnnnn job log. Use these messages to help you identify and correct configuration problems.

If this log does not get created, then the SVRnnnnnnn job never got control. This in turn means that some aspect of your TURNOVER® for iSeries setup – incorrect authority for the necessary network directories, for example – is halting the distribution job before it can submit the SVRnnnnnnn job, or causing an error during job submission. Your distribution job log contains messaging to help you track these things down.

You can see the various jobs associated with your form using the IBM i command **WRKUSRJOB**. From there, you can access all relevant spool files.

Common configuration errors

The following topics describe some common issues you might experience while configuring and testing this feature.

SVRnnnnnn job not started

The symptoms for this condition are an interactive message that the distribution job ended abnormally, the presence of a DISERROR spool file in your output queue that tells you to check your deployment log report – and the absence of a SVRnnnnnn spool file (the “deployment log report”).

Why this happens: The program that performs the FTP distribution is a Java program. Java programs require a CLASSPATH, which is akin to an IBM i library list. The CLASSPATH contains a list of paths to one or more java archive files (“.jar files”), which are required for the application to do its work.

The CLASSPATH for our Java application requires two .jar file paths: one for our TURNOVER .jar file, and one for an IBM .jar file that is typically installed by the IBM Toolbox for Java licensed IBM i program.

The TURNOVER .jar file will always be:

`/TurnOver/DeployFTP.jar`

The IBM Java toolbox .jar file can be obtained from more than one source, so its path specification can vary. The value we ship for this .jar file is:

`/QIBM/ProdData/HTTP/Public/jt400/lib/jt400.jar`

This is what the path would be if the .jar file was installed by the licensed program. So, if the IBM .jar file was installed from a different source and stored in a location other than this default, then the program cannot submit the SVR job and this error occurs.

What to do: We store the Java CLASSPATH in a data area called TDPYFTPCP. Use the **CHGDTAARA** command to edit the data area and modify the path for the IBM .jar file. In the example below, the path you would replace is shaded:

Offset	Value
	*...+...1...+...2...+...3...+...4...+...5
0	'/TurnOver/DeployFTP.jar:/QIBM/ProdData/HTTP/Public'
50	'/jt400/lib/jt400.jar'
100	' '
150	' '
200	' '
250	' '

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“Unknown host” error

Why this happens: If there is a typographical error in the host name or IP address you specified in your system definition, the SVRnnnnnn job cannot locate the target system and returns an “unknown host” error. This is what your SRVnnnnnn log would look like:

```
Waiting on data queue. Key = 062158
Received entry. Function = *CONNECT.
Exception: java.net.UnknownHostException: ftp.yourrsys.com
java.net.UnknownHostException: ftp.yourrsys.com
    java/lang/Throwable.<init>(Ljava/lang/String;)V+4 (Throwable.java:81)
    java/net/InetAddress.getAllByName0(Ljava/lang/String;)[Ljava/net/InetAddress;
    java/net/Socket.<init>(Ljava/lang/String;I)V+1 (Socket.java:89)
    FtpBean.putBinaryFile(Ljava/lang/String;Ljava/lang/String;Ljava/lang/String;
    DeployFtp.connect(Ljava/lang/String;Ljava/lang/String;Ljava/lang/String;
    DeployFtp.<init>(Ljava/lang/String;Ljava/lang/String;Ljava/lang/String;)
    DeployFtp.main([Ljava/lang/String;)V+0 (DeployFtp.java:171)
Waiting on data queue. Key = 062158
Received entry. Function = *ENDSVRJ0B.
Java program completed
```

What to do: All you have to do for this is correct the host name or IP address you used in your system definition, and try your test again.

“Invalid Password” error

Why this happens: This error occurs when the SVRnnnnnn job is able to locate the host system and start a connection, but cannot complete the connection because the password you supplied and confirmed in your target system definition is not valid for some reason.

What to do: In the TURNOVER® for iSeries Client  **Administration** component, open the system definition in **Change** mode, and go to the **TCP/IP Method Details** page (see page 4). Re-type the password (be careful about case sensitivity), confirm it, and try your test again.

“No such path or directory” error

If the SVRnnnnnn job connects successfully but cannot find a folder you specified, your log might look like this:

```
Waiting on data queue. Key = 062250
Received entry. Function = *CONNECT.
Connected to ftp.yourrsys.com.
Waiting on data queue. Key = 062250
Received entry. Function = *PUT.
Exception: java.io.IOException: No such path or directory. /qntc/web pdf/prod
java.io.IOException: No such path or directory. /qntc/web pdf/prod
    java/lang/Throwable.<init>(Ljava/lang/String;)V+4 (Throwable.java:81)
    java/io/RandomAccessFile.<init>(Ljava/lang/String;Ljava/lang/String;)V+71 (RandomAccessFile.java:72)
    FtpBean.putBinaryFile(Ljava/lang/String;Ljava/lang/String;JLftpObserver;)V+0 (FtpBean.java:677)
    FtpBean.putBinaryFile(Ljava/lang/String;Ljava/lang/String;)V+0 (FtpBean.java:623)
    DeployFtp.<init>(Ljava/lang/String;Ljava/lang/String;Ljava/lang/String;)V+0 (DeployFtp.java:13)
    DeployFtp.main([Ljava/lang/String;)V+0 (DeployFtp.java:171)
Waiting on data queue. Key = 062250
Received entry. Function = *ENDSVRJ0B.
Java program completed
```

Why this happens: This error might occur when the folder name or path specified by an FTP command associated with the system definition, application level, or type code – such as a change directory command, for example – is miss-typed or case sensitive.

What to do: To correct this problem, determine the correct path and fix the associated command as indicated.

RECOVERY AFTER FULL OR PARTIAL DISTRIBUTION

This topic describes how to restore original objects to the target server in the event of an undiscovered error or a distribution job failure.

IMPORTANT!

Your application must make use of object archiving to build recovery forms. (To verify this, in the TURNOVER® for iSeries Client  **Applications** component, make sure that the **Archive objects** box is selected (checked) in the IFS type codes defaults in the application definition.

Recovering after a successful distribution

If during post-distribution testing you discover a problem that requires you to restore the target computer to its original state, then you can create, run and distribute a recovery form to put the old objects back into place.

Recovering after a partial distribution

If a failure occurred in the middle of a distribution job, the target site could be left in an incomplete state (some objects copied, others not). Depending on the error, you can correct the problem and either re-distribute the form OR create, run, and distribute a new form.

REFERENCE INFORMATION

This topic describes database files and data areas related to the direct FTP distribution feature.

Files

File name	Description
TDAPPCM	Direct FTP Application Level FTP Commands file
TDAPPSV	Direct FTP Applications to Distribute file
TDLOG	Direct FTP Log file
TDSERVE	Direct FTP System Definition file
TDSRVCM	Direct FTP System Commands file
TDTYPCM	Direct FTP Type Code Commands file
TDTYPSV	Direct FTP Type Codes to Distribute file

Data areas

Data area	Description
TDPYFTPCP	Contains the Java archive file (.jar file) path specifications for the CLASSPATH parameter used by the Java application that performs direct FTP distribution. (Read more about the role of this data area in the <i>SVRnnnnnn job not started</i> topic on page 18.)
TDPYFTPJQ	Defines the job queue where the SVRnnnn job is submitted. The default job queue is set to TSERVER in QGPL. If you choose to specify another job queue, then the job queue you specify must either be a multi-threaded job queue, or one that is guaranteed to always be free.

SUMMARY

You should now be able to successfully set up, test, and troubleshoot a direct FTP distribution scenario for your TURNOVER® for iSeries application definition. In addition, you should now be able to recover objects to the target server in the event of a mid-distribution failure or post-distribution problem.

If you have any questions about the information in this supplement, please contact a UNICOM Systems, Inc. Technical Support Representative via phone, fax, or email at one of the locations shown at the beginning of this document.