

Oracle FLEXCUBE Investor Servicing® DDL Tool Reference Guide

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1 Preface

This document describes various Tools available to work on FLEXCUBE Application development

1.1 Audience

The Tools getting started book is intended for FLEXCUBE Application Developers / Users to get overview of various tools available development.

1.2 Related documents

For more information, refer the below documents:

- *FCIS-FD01-01-01-Development Overview Guide*
- *FCIS-FD05-02-01-RAD-Reference*
- *FCIS-FD05-03-01-DDL-Reference*
- *FCIS-FD05-04-01-TrAX-Reference*

1.3 Conventions

The following text conventions are used in this document:

Convention Meaning

boldface Boldface type indicates graphical user interface elements (for example, menus and menu items, buttons, tabs, dialog controls), including options that you select.

italic italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

`monospace` Monospace type indicates language and syntax elements, directory and file names, URLs, text that appears on the screen, or text that you enter.

2 Introduction

2.1 How to use this Guide

The information in this guide includes:

- [Chapter 2, “Introduction”](#)
- [Chapter 3, “Tools Introduction”](#)
- [Chapter 4, “Development Tools”](#)
- [Chapter 5, “Other Tools”](#)

3 Tools Introduction

There are various Tools available to develop / extend FLEXCUBE functionality. These tools could be classified as below:

- Development Tools
- Debugging Tools
- SCM Tools
- Utilities

4 FLEXCUBE Development Tools

FLEXCUBE Application development is carried out using following tools:

- RAD Tool
- DDL Tool
- TraX Tool
- PI/Sql Developer

4.1 RAD Tool

Rapid Application Development (RAD) is a Web based tool that is used to develop the FLEXCUBE IS screens and other components. It is the Integrated Development Environment for the FLEXCUBE Application Development.

Refer *FCIS-FD02-01-01-RAD Getting Started.dox* for more information.

4.2 DDL Tool

DDL Tool is used to create and work on FLEXCUBE Application database objects. The tool also provides a feature to generate a DDL script for all the changes made. The changes are also traceable across projects.

The tool is used to create the following objects:

- Table
- Synonym
- Sequence
- Index
- Constraint
- Conversion Script
- Static data inserts updates and deletes.

Refer : FCIS-FD05-03-01-DDL-Reference for more information.

Note: *This tool is internal to Oracle Financial Software Services and the above document may not be available externally.*

4.3 TrAX Tool

Trax Tool helps to maintain the XSD's for a project and analyze them for errors. This also facilitates in generation of Config files, WSDL file and Help files which is required for deployment of FLEXCUBE web service.

Typical operations done in TrAX:

1. Create New webservice/operation and type/message XSDs
2. Upload RAD Generated XSD files
3. Validate XSD Files for Inconsistency
4. Generate Config, Implementation & WSDL files for web service deployment

Refer : FCIS-FD05-04-01-TrAX-Reference for more information.

Note: *This tool is internal to Oracle Financial Software Services and the above document may not be available externally.*

4.4 Pl/Sql Developer

PL/SQL Developer is an Integrated Development Environment that is specifically targeted at the development of stored program units for Oracle Databases. PL/SQL Developer helps in ease of use, maintain code quality and improve productivity Oracle application development.

Some features of PL/SQL developer

- Powerful Pl/SQL Editor with Syntax Highlighting, Object describer, Code Assistant, Compiler hints.
- Integrated Debugger – debug code with Step In, Step Over, Step out, Breakpoints
- Beautifier – enhance the code with a standard template for code formatting
- Command window – similar to SQL*Plus with enhancements
- Reports – various reports on database
- Object Browser
- Export Objects

Refer vendor document for more information.

5 Other Tools

5.1 SCM Tools

Oracle FLEXCUBE IS development uses IBM clear-case tool for version control. Refer vendor documents for more information.

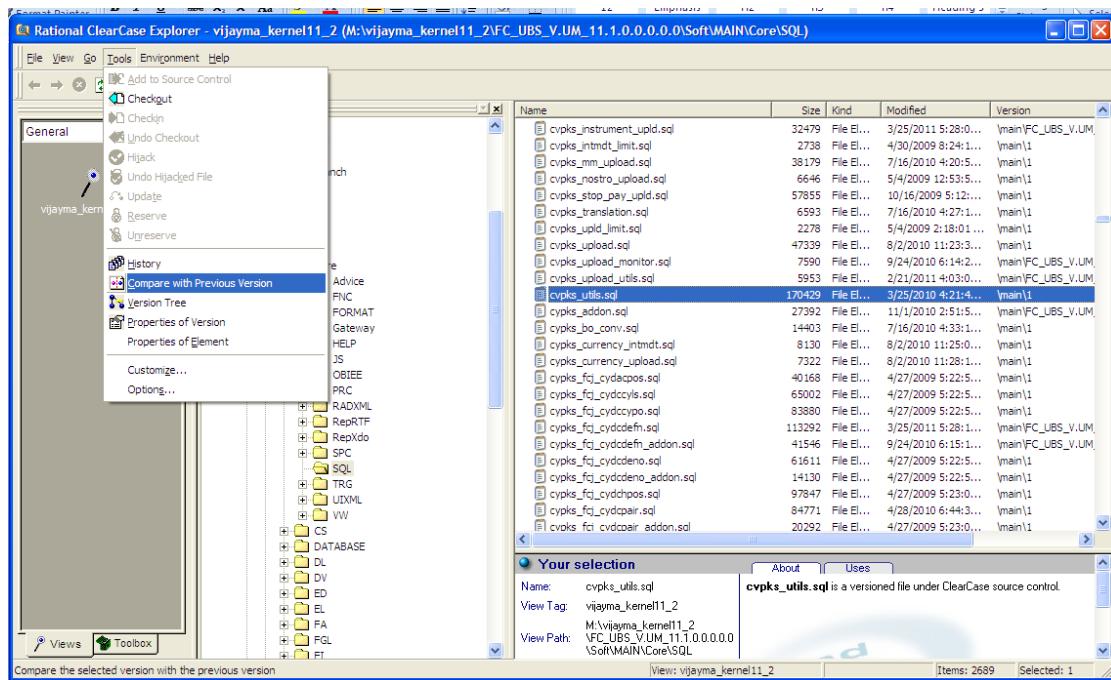
5.2 Utilities

Below are some of Utility Tools which could be found handy while developing a FLEXCUBE Application.

5.2.1 ClearCase - File Compare Utility

Clear case provides option to compare the files so that software changes can be verified.

From the explorer, select the required file, and Select the Option - Tools → Compare with Previous Version.



```

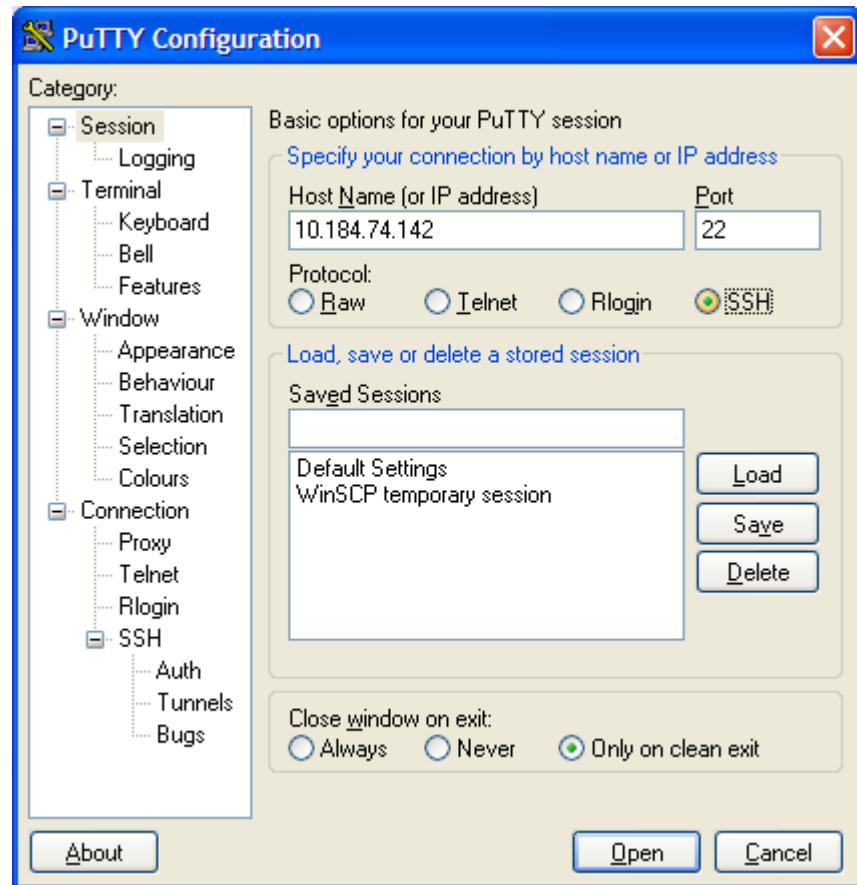
[1] M:\vijayma_kernel11_2\FC_UBS_V.UM_11.1.0.0.0.0.0\Soft\MAIN\Core\SQL\cypksAddon.sql@main\FC_UBS_V.UM_11.2.0.0.0.0.0\0 ... - Di...
CREATE OR REPLACE PACKAGE BODY CYPKS-addon IS
  ...
  -- File Name : cypksAddon.sql
  -- Module : CURRENCY MAINTENANCE
  --
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  --
  CHANGE_HISTORY
    --this package is written by sachin shukla
    --changes are still going on in this to
    --improve its performance
  08-JUL-2004 IC FOCUS TESTING - Added exception handling in fn_spotrate ; decrementing the
  --
  CADCCD- Added debug msgs
  --
  pkg_branch_sttms_branch_branch_code%type;
  pkg_today DATE;
  pkg.RowCount BINARY_INTEGER; -- stores total no. of rows in PL/SQL table
  --this string returns the row number of ccy pair in the pl/sql table
  pkg_rate_str VARCHAR2(32767);
  --this variable specifies whether caching is required or not
  pkg_cache_rates cstb_param param_val%TYPE;
  ...

[2] M:\vijayma_kernel11_2\FC_UBS_V.UM_11.1.0.0.0.0.0\Soft\MAIN\Core\SQL\cypksAddon.sql@main\FC_UBS_V.UM_11.2.0.0.0.0.0\0 ... - Di...
CREATE OR REPLACE PACKAGE BODY CYPKS-addon IS
  ...
  -- File Name : cypksAddon.sql
  -- Module : CURRENCY MAINTENANCE
  --
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  --
  CHANGE_HISTORY
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    --changes are still going on in this to
    --improve its performance
  08-JUL-2004 IC FOCUS TESTING - Added exception handling in fn_spotrate ; decrementing the
  --
  Modified By : IshwayaR
  Modified On : 07-Nov-2010
  Modified Reason : FCUBS 11.2 SFR #388/ITR-1
  Search String : 9NT1428 Kernel 11.2 Str#388/ITR1
  CADCCD- Added debug msgs
  --
  pkg_branch_sttms_branch_branch_code%type;
  pkg_today DATE;
  pkg.RowCount BINARY_INTEGER; -- stores total no. of rows in PL/SQL table
  --this string returns the row number of ccy pair in the pl/sql table
  pkg_rate_str VARCHAR2(32767);
  --this variable specifies whether caching is required or not
  pkg_cache_rates cstb_param param_val%TYPE;
  ...
  
```

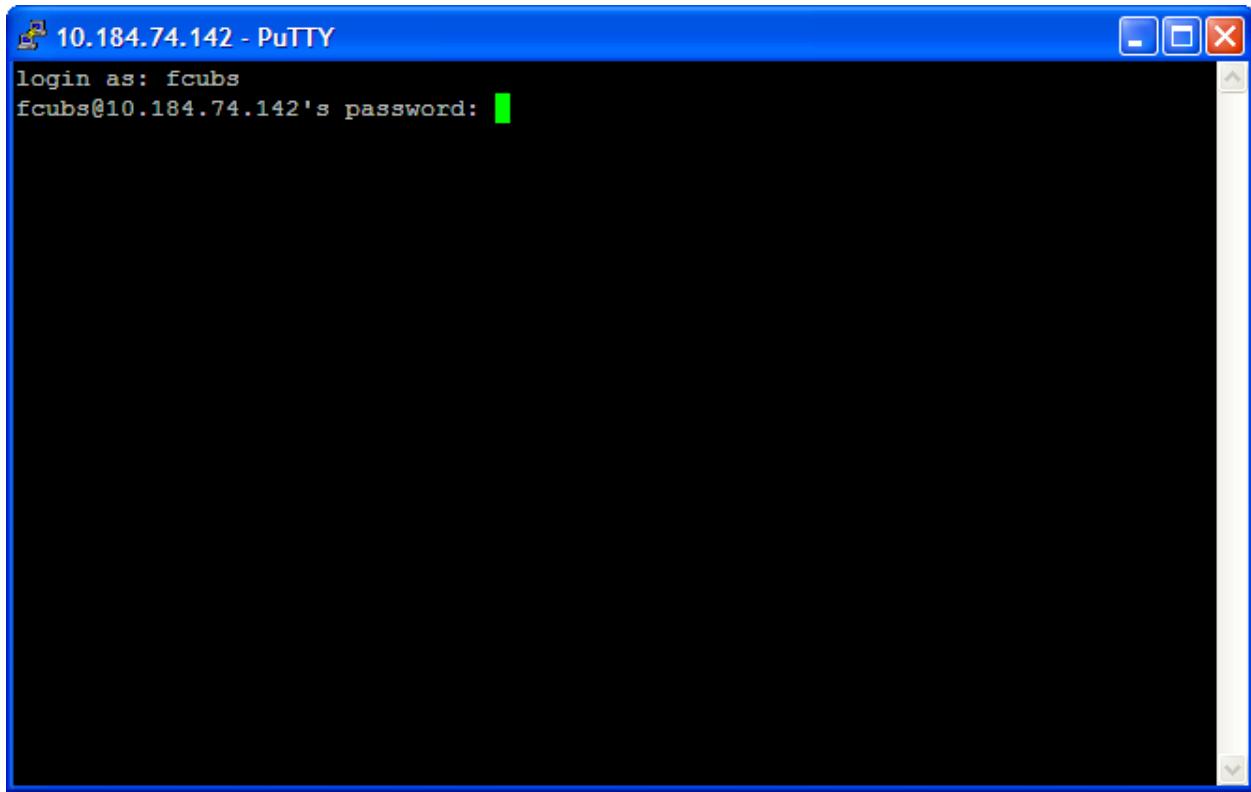
5.2.2 Putty (Unix Command Line)

PuTTY is a free client terminal application which connects user to a remote UNIX server securely. The interface is through Unix commands and this tool would be used to execute commands in remote sever, to copy user debug files generated by FLEXCUBE Application that is deployed on unix based operating systems.

Step 1) Login to a remote server – provide IP address & select SSH



Step 2) Provide User Credentials



10.184.74.142 - PuTTY

```
login as: fcubs
fcubs@10.184.74.142's password: █
```

This image shows a PuTTY terminal window with a blue title bar. The title bar displays the IP address "10.184.74.142 - PuTTY". The main window is black and contains the text "login as: fcubs" in white, followed by "fcubs@10.184.74.142's password: █" where the password is obscured by a series of white characters. The window has standard window controls (minimize, maximize, close) in the top right corner.

Now, user is ready to perform command line operations.



10.184.74.142 - PuTTY

```
IPL142DOR@/home/fcubs> █
```

This image shows a PuTTY terminal window with a blue title bar. The title bar displays the IP address "10.184.74.142 - PuTTY". The main window is black and contains the text "IPL142DOR@/home/fcubs> █" where the prompt is followed by a series of white characters. The window has standard window controls (minimize, maximize, close) in the top right corner. A vertical scroll bar is visible on the right side of the window.

User's typically perform FTP operations in this mode.

5.2.3 WinScp (Windows Secure Copy)

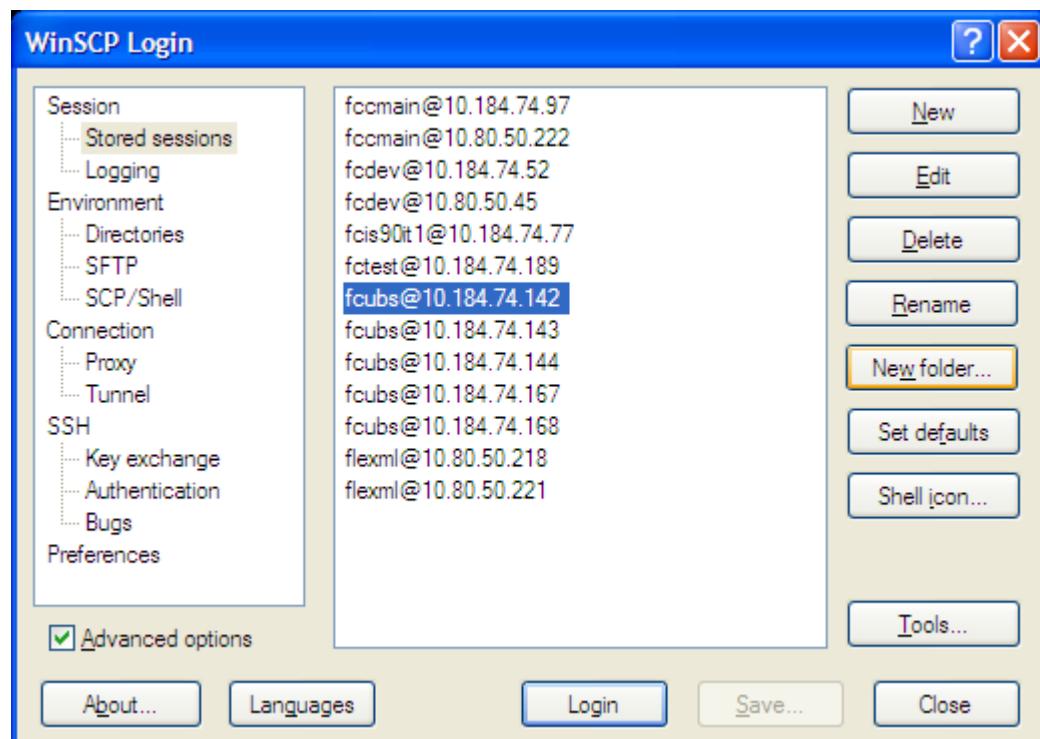
WinSCP (Windows Secure Copy) is a free and open source SFTP and FTP client for Microsoft Windows. Its main function is secure file transfer between a local computer and a remote computer. For secure transfer's it uses Secure Shell (SSH) protocol.

This tool acts similar to Windows Explorer providing graphical user interface and ease to work with files in Unix remote systems.

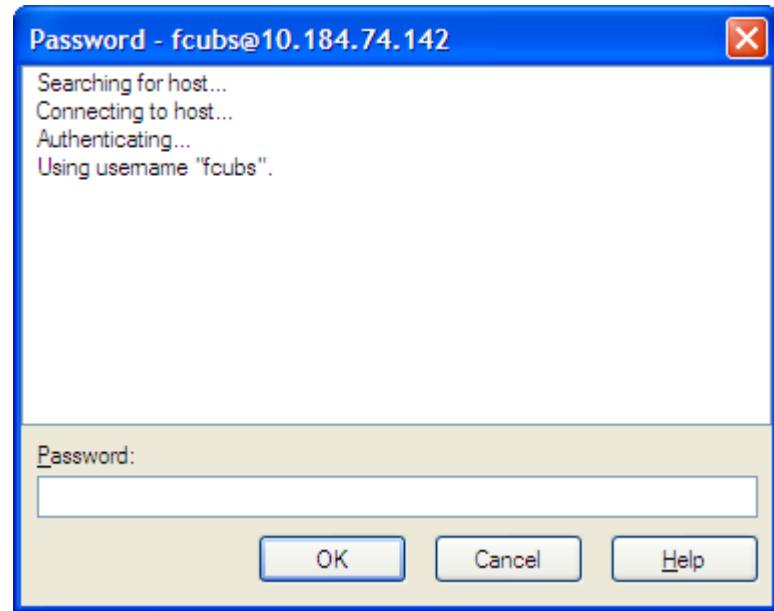
This tool would be generally used to get Debug files generated for the user from FLEXCUBE Application from pre-defined path.

a) Login to WinSCP

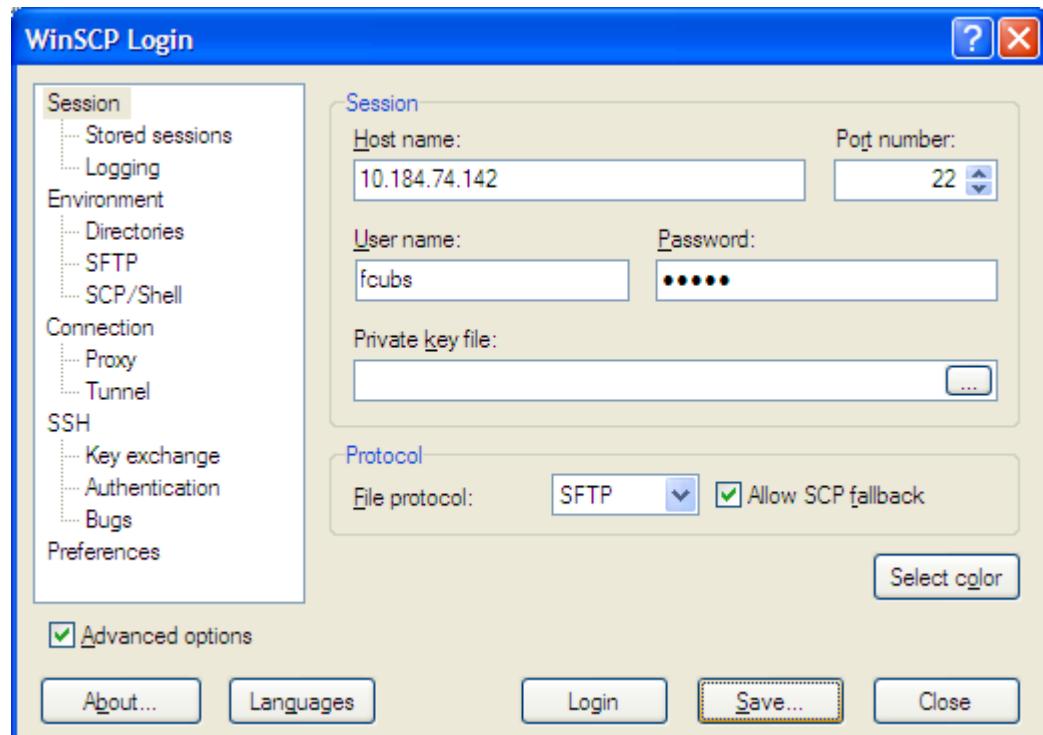
The below screen is the Login Screen.



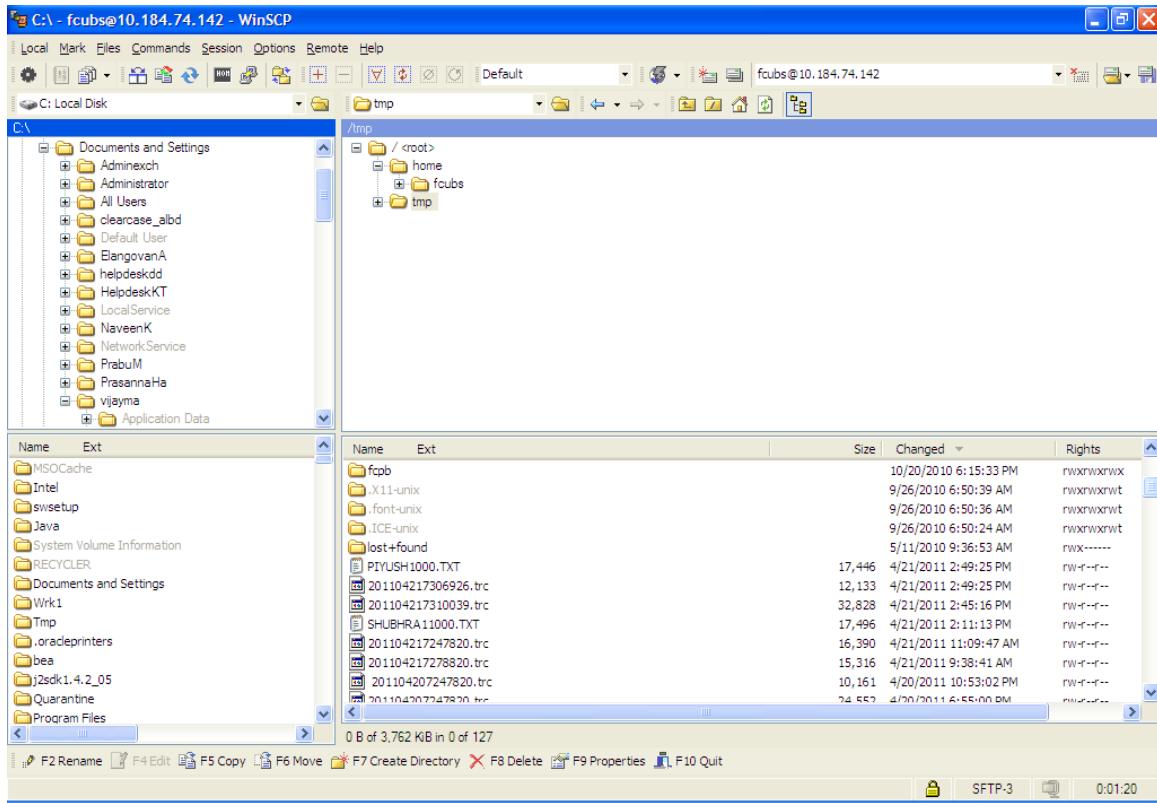
b) Select a pre-defined server / provide new server details



Creating a new Entry for Server



c) Main Screen (Explorer)



There are Two sections in the screen. The Left Section represents the Local computer, and the Right section represents the remote server.

User could copy the required debug file from server to the local machine by simple drag and drop.

User could also perform other operations on the remote server such as create / delete / copy / move / rights operations right from the screen itself.

When copying from remote server to local machine, care should be taken to select appropriate parameter from the options. Options are Text / Binary mode.
 Select Text mode to indicate it is a human readable ASCII English file. Eg., debug file
 Select Binary mode to indicate it is a system readable file such as an Oracle Import Dump file.



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