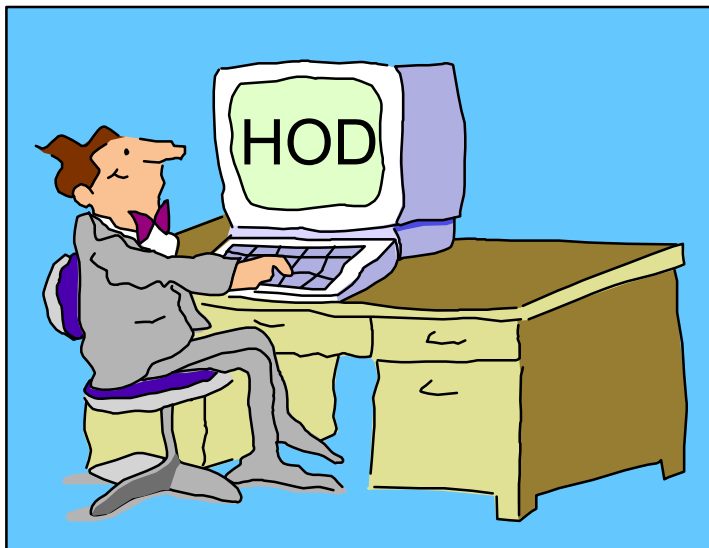IBM®

IBM WebSphere
Host On-Demand V6
for OS/390 and z/OS

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Agenda

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Abstract

Title: IBM Host On-Demand V6 for OS/390 and z/OS

Presenter: Linda Harrison supports OS/390 Host On-Demand in IBM Advanced Technical Support.

Audience: OS/390 Host On-Demand Installers

Abstract: Host On-Demand's browser-based access is the simplest way ever for users to reach critical host data because the user is not required to load or configure any software. Host On-Demand is a Java enabled Web based terminal emulation software supporting TN3270(E), TN5250, VT420, and IBM CICS Java Gateway. For users, Host On-Demand helps eliminate the confusing host and port names as all of the configuration is easily provided by the Administrator. From a web browser, users just click on a hyperlink that launches a session with the host. In addition to the usual web access, any number of sessions can be launched with multiple hosts at the same time. Since Host On-Demand installs on a server, maintenance, distribution, and upgrades are simplified. In the case of OS/390 Host On-Demand, the server that Host On-Demand installs onto is the OS/390 system, where most of today's enterprise mission-critical information still resides.

Host On-Demand:

Overview

Host On-Demand Overview

➢ IBM Host On-Demand V6 is part of the IBM Host Access Client Package.

  ➢ Host On-Demand V6 (IBM Host Access Client Package 2)

    ➢ Announcement Letter 201-053

  ➢ Host On-Demand V5 (IBM Host Access Client Package 1)

    ➢ Announcement Letter 200-324

Host On-Demand Overview

➤ IBM Host On-Demand V6 is part of the IBM Host Access Client Package.

> ➤ Host On-Demand gives users Web browser-based emulation access to host applications and data. Host On-Demand is installed only on the Web server, and the Host On-Demand applet is downloaded via a Web URL to the users' Web browser. Code maintenance, updates and configurations all occur on the server, and users are updated automatically.
>
> ➤ TN3270E, TN5250, VT52/100/220 and IBM CICS Java Gateway
>
> ➤ Secure Sockets Layer (SSL) V3.0 (X.509)
>
> ➤ Screen Customizer/LE (default graphical user interface (GUI))
>
> ➤ Database On-Demand
>
> > ➤ Java applet uses Java Database Connectivity (JDBC) driver
> >
> > ➤ Access to DB2 information on AS/400
> >
> > ➤ Structured Query Language (SQL) requests to AS/400 databases

HOD Overview (cont.)

➢ Steps to Logon to TSO via a Host On-Demand TN3270 Session:

1. Start the Web Browser; double click on the browser icon.

2. Connect the Web Browser to the HTTP Web Server (TCP/IP port 80); enter the Host On-Demand HTML URL or if the URL is bookmarked then click on Favorites and select the Host On-Demand HTML URL.

3. Optionally logon to the HTTP Web Server with a RACF userid and password. HTTP Server httpd.conf pass rule defines Host On-Demand Server.

4. Optionally logon to the Host On-Demand Server with a Host On-Demand userid and password. (TCP/IP port 8999). The Host On-Demand Client Applet (terminal emulator client) is downloaded (TCP/IP port 80) or previously cached on the workstation.

5. Launch a TN3270 Session; double click on a TN3270 session icon, or session may be defined to automatically launch. Host On-Demand session icons look like PComm session icons. Session is established to a TN3270E Server (TCP/IP port 23) and the "green" screen is displayed.

6. Logon to TSO with a RACF userid and password.

HOD Overview (cont.)

Steps 1 and 2 - Launch the Browser and Enter URL - May be combined by bookmarking URL and dragging and dropping the bookmark to the desktop.

Step 3 - Connect to the HTTP Server - The HTTP Server can prompt for a valid RACF userid/password to authenticate the client. This is optional. HTTP SSL with server authentication may be enabled. HTTP SSL client authentication may be enabled to authenticate the client with a digital certificate.

Step 4 - Logon to the HOD Server - The HOD userid is required to be able to save session setting changes on the server. The password is only required to prevent someone entering some else's userid and changing their session settings. When using the Configuration Servlet the HOD userid/password will be passed as HTTP data so if HTTP Server SSL is enabled this will be encrypted.

- A group userid or no userid could be used if the session setting are saved to the user's workstation instead of the server.
- The userid/password could be saved in the HTML page. No user prompt.
- If the session settings changes do not need to be saved at all then no userid/password is required.
- Native Authentication can be used to make the HOD password the RACF password.

HOD Overview (cont.)

Step 5 - Launch a TN3270 Session - Any session that has "Start Automatically" selected on the Advanced Tab will launch automatically after step 4. TN3270 SSL server authentication may be used to encrypt the session. Optional TN3270 SSL client authentication can be used as well to authenticate the client.

Step 6 - Logon to TSO - This can be eliminated with Express Logon.

Note: The TN3270E Server does not have to be on the same OS/390 or z/OS as the Host On-Demand and Web Server; it can be on any TN3270E Server on the TCP/IP Network. It does not need to be an OS/390 or z/OS TN3270E Server.

Note: HTTP session on port 80, Host On-Demand session on port 8999, and/or telnet session on port 23 may be customized to other ports.

Host On-Demand:

Server

Host On-Demand Server

➤ HOD Server is supported on the following platforms:

  ➤ Windows NT 4.0 with SP5

  ➤ Windows 2000 (Professional, Server, and Advanced Server)

  ➤ AI X 4.3.3, 4.3.4, 5.1

  ➤ OS/2 Warp Server 4, OS/2 Warp Server for e-Business 4.5

  ➤ Novell Netware 4, 5, 6

  ➤ Sun Solaris 2.6, 2.7, 2.8

  ➤ OS/400 V4R5, V5R1

  ➤ HP-UX 10.20, 11.00

  ➤ Redhat Linux 6.2, 7.0, 7.1

  ➤ SUSE Linux 6.4, 7.0, 7.1

  ➤ **OS/390 2.5+, z/OS V1R1+**

  ➤ Caldera OpenLinux 2.3

  ➤ TurboLinux 6.0, 6.1

  ➤ SCO Unixware 7

  ➤ Linux on zSeries

Host On-Demand:

Product Packaging

Host On-Demand Packaging

➤ Host Access Client Package for Multiplatform Version 2.0, Announcement Letter 201-267, is Program Identification Number PID# 5733-A57.

  ➤ Please see Announcement Letter or Web page for order information.

  ➤ Host On-Demand for OS/390 or z/OS Media types:

    ➤ 6250 tape

    ➤ 3480 cartridge

    ➤ 4 millimeter cartridge

➤ Host On-Demand Toolkit CD and Host On-Demand Windows CD are delivered with the OS/390 or z/OS media order.

Host On-Demand Software Requirements

➤ OS/390 Software Requirements

Program Number	Product Name and VRM/Service Level
5647-A01 or 5694-A01	OS/390 SMP/E Version 2 Release 5+ with PTF UR51068 or z/OS Version 1 Release 1+
5668-949 or 5655-G44	System Modification Program/Extended (SMP/E) Release 8.1+ with PTF UR51070 or IBM SMP/E Version 3 Release 1+
5655-A46	Java for OS/390 or z/OS V1.1.8 (all releases) or V1.3 (OS/390 V2R8+ or z/OS V1R1+)
5697-D43	Domino Go Webserver for OS/390 V5R0M0+ (IBM HTTP Server)
5647-A01 or 5655-A98	WebSphere Application Server for OS/390 V1R2 or WebSphere Application Server for OS/390 V3R02 or V3R5 or Lotus Go V4.6.2 or Netscape IPlanet (JRun) V4.1 (ONLY REQUIRED IF CONFIGURATION SERVLET FUNCTION IS USED)
	IBM LDAP Directory Server for OS/390 V2R5-10, z/OS V1.1, V2.2 or IBM LDAP Directory Server V2.1, V3.1.1, V3.2.1 (IBM SecureWay Directory) or Netscape Directory Server V3.1, V4.0 (Windows NT and AIX) (ONLY REQUIRED IF LDAP IS USED)

HOD Software Requirements (cont.)

➤ The OS/390 or z/OS Communications Server TCP/IP Services and Unix Systems Services, both included with OS/390 and z/OS, are required by IBM Host On-Demand for OS/390 or z/OS at run time.

➤ OS/390 V2R10 required APARs (for OS/390 V2R10 only):

➤ OW45791 for LDAP support

➤ OW45575 for Java

➤ After SMP/E install the shell script must be executed to create the paths and expand the tar files. In /usr/lpp/HOD:

hod60mvs.sh - to install base product

HOD Software Requirements (cont.)

➤ Program Temporary Fix (PTF) = Corrective Service Diskette (CSD)

CSD 2
part 1
APAR OW53832
PTF UW87307
part 2
APAR OW53833
PTF UW87308

➤ CSD 1 was skipped and is not missing from the list.

➤ The fixes are large enough to span two tapes so the CSD has a part 1 and a part 2.

➤ PTFs are cumulative:

   HOD V6 Base tape + CSD 2 = HOD V6.0.2

➤ After SMP/E install the shell scripts must be executed to create the paths and expand the tar files. In /usr/lpp/HOD:

   hod60mvs.sh - to install base product

   hod60ptf.sh - to install the ptf

Host On-Demand: Installation

Host On-Demand Installation

➤ SMP/E install with mainframe media provides Reliability, Availability, and Serviceability support.

➤ Follow directions in Program Directory, GI 10-3191-00.

➤ 1000 MB HFS space is required.

➤ hod60mvs.sh may take a longer than expected time to complete (depending on system resources). TSO time-out and other timers should be customized accordingly to prevent interruption of execution before completion.

Host On-Demand Installation

➢ As per the Program Directory, the following lines should be added to the HTTP Webserver's configuration file (ie. /etc/httpd.conf):

```
pass /hod/*.html        /usr/lpp/HOD/hostondemand/HOD/*.html.ascii
pass /hod/*.HTML        /usr/lpp/HOD/hostondemand/HOD/*.HTML.ascii
pass /hod/*.js          /usr/lpp/HOD/hostondemand/HOD/*.js.ascii
pass /hod/*.properties  /usr/lpp/HOD/hostondemand/HOD/*.properties.ascii
pass /hod/*.props       /usr/lpp/HOD/hostondemand/HOD/*.props.ascii
pass /hod/*             /usr/lpp/HOD/hostondemand/HOD/*
AddType .cab   application/octet-steam     binary 1.0
AddType .jar   multipart/x-zip             binary 1.0
```

Note: The HTTP Server must be recycled to pick up the above changes.

HOD Install (cont.)

➤ Uncomment the classpath in the ServiceManager.sh as appropriate.

  ➤ I needed the following with WAS 3.02:

    export CLASSPATH=/usr/lpp/java/J1.1/lib/classes.zip

    export PATH=$PATH:/usr/lpp/java/J1.1/bin

  ➤ I needed the following with WAS 3.5:

    export LIBPATH=/usr/lpp/java/IBM/J1.3/lib

    export PATH=/usr/lpp/java/IBM/J1.3/bin:$PATH

    export JAVA_HOME=/usr/lpp/java/IBM/J1.3

HOD Install (cont.)

➤ A sample PROC is provided as file "HOMSERVR" in the directory "/usr/lpp/HOD/hostondemand/lib/". This may be copied to your system PROCLIB and used to start the Host On-Demand Server. This requires a userid with **UID 0**. You must use the RACF STARTED class to enable this.

➤ If the userid with **UID 0** is HODSERV in group OMVSGRP and the proc name used to start the Host On-Demand server is HODSRV, enter the following RACF commands:
```
RDEFINE STARTED HODSRV.* STDATA(USER(HODSERV) GROUP(OMVSGRP))
SETROPTS RACLIST(STARTED) REFRESH
```

HOD Install (cont.)

➤ The Host On-Demand Directories After Installation

/usr/lpp/HOD - default distribution libraries

/usr/lpp/HOD/hostondemand/HOD - the "publish" directory

/usr/lpp/HOD/hostondemand/private - the private directory

/usr/lpp/HOD/hostondemand/lib - ServiceManager.sh directory

/usr/lpp/HOD/hostondemand/HOD/en/doc/samples/html - session1&2 directory

HOD Install (cont.)

➤ Optional Steps

  ➤ Make Host On-Demand server bind to only one TCP/IP stack. Add the following to the ServiceManager.sh:

  export _BPXK_SETIBMOPT_TRANSPORT=*stname*

  (where *stname* is the TCP/IP stack name)

  ➤ Change the Service Manager's Configuration port. See the Online Help Index item "changing the Service Manager's configuration port".

  Note: Remember to change the port number reserved in the PROFILE.TCPIP file if you change the Service Manager's Configuration port.

HOD Install (cont.)

Note: The "/" may be missing from the "STDOUT DD" and "STDERR DD" "PATH"
statements in the sample PROC. If the bottom of the PROC looks like this:

```
//STDOUT    DD PATH='tmp/homservr-stdout',
//          PATHOPTS=(OWRONLY,OCREAT,OTRUNC),
//          PATHMODE=SIRWXU
//STDERR    DD PATH='tmp/homservr-stderr',
//          PATHOPTS=(OWRONLY,OCREAT,OTRUNC),
//          PATHMODE=SIRWXU

//SYSOUT    DD SYSOUT=*
```

It should be changed to this:

```
//STDOUT    DD PATH='/tmp/homservr-stdout',
//          PATHOPTS=(OWRONLY,OCREAT,OTRUNC),
//          PATHMODE=SIRWXU
//STDERR    DD PATH='/tmp/homservr-stderr',
//          PATHOPTS=(OWRONLY,OCREAT,OTRUNC),
//          PATHMODE=SIRWXU

//SYSOUT    DD SYSOUT=*
```

OS/390 and z/OS Communications Server IP Customization

and 3270 Host Print

IP Customization for Host On-Demand

➢ Defining HOD in the PROFILE TCPIP

  ➢ Host On-Demand can be autologged by TCP/IP and a port can be reserved for the Host On-Demand Server. Add the following to the PROFILE TCPIP:

    AUTOLOG 5

       HOMSERVR

    PORT

       8999 TCP HOMSERVR

  (where HOMSERVR is the name of the proc to start the HOD Service Manager)

  ➢ You may want to rename the HOMSERVR sample job to a started PROC name of less than 8 characters (ie. HOMSRVR). This will help when displaying subprocesses and stopping the Host On-Demand Server.

IP Customization for HOD (cont.)

➢ You can add the following to the PROFILE TCPIP:

AUTOLOG 5

   HODSRVR

PORT

   8999 TCP OMVS

After HOD comes up display the ports and take note of what job is using 8999 with the following command:

D TCPIP,procname,NETSTAT,SOCKETS

(where procname is the name of the proc to start the TCP/IP stack)

➢ Then optionally you may replace OMVS on the PORT statement with the job name using the port.

Note: If you do this you may need to check to see if the job name changes after migration to a new release.

IP Telnet Customization for HOD

➤ PROFILE TCPIP BEGINVTAM STATEMENT

PORT xxxx -define which telnet port the BEGINVTAM effects

HNGROUP -define group of host names (available in OS/390 V2R7 and above)

IPGROUP -define group of ipaddrs

LUGROUP -define group of LUs

LUMAP -map LU or LUGROUP to host name, HNGROUP, ipaddr, or IPGROUP and
   optionally associate a printer LU or PRTGROUP

PRTGROUP -define group of printer LUs

PRTMAP -map printer LU or PRTGROUP to host name, HNGROUP, ipaddr, or
   IPGROUP

➤ HOD Session Customization

Destination Port

TN3270E -required for LU or LU Pool specification

LU or LU Pool

Associated Printer Session

3270 Printing with HOD

➤ Host On-Demand 3270 Printer Session

   ➤ Emulates an IBM 3287 printer in either LU Type 1 (SCS) or LU Type 3 mode.

   ➤ The printer LU must be defined in VTAM and TCP/IP.

   ➤ The mainframe application that the user is printing from must be setup to print to the VTAM LU.

   ➤ Please see the Host On-Demand V5 Host Printing Reference.

   ➤ In some applications a printer is associated with a userid. For this type of application TCP/IP has the capability to "associate" or "map" printer LUs "generically" or "specifically" with user terminal LUs.

      ➤ New with Host On-Demand V6 the associated printer session can be automatically closed when the terminal session is closed.

➤ PROFILE TCPIP BEGINVTAM Statement Example

   ➤ Please see Appendix A in this presentation for an example.

Host On-Demand:

Administrator

Host On-Demand Administrator

➢ Essentially the same as for all the other Host On-Demand server platforms:

  ➢ Connect to HOD server:

    http://hod_server_name/hod/HODMain.html

  ➢ Select Administration and logon as **admin/password**.

  ➢ The password may be changed but the userid cannot be changed.

  ➢ Once logged on:

    Create groups

    Create sessions (ie. TN3270E, TN5250, VT, etc.) for groups

    Create users and assign them to groups

    Create specific sessions for individual users as necessary

HOD Admin (cont.)

➤ A session defines the Emulator Options (Destination Address, Destination Port, TN3270E Support, Enable Host Graphics, etc.)

➤ Sessions can be created for a group or an individual user.

➤ Users will inherit all sessions associated with all of the groups to which they belong, in addition to any specific sessions created for that individual user.

➤ Every user must be a member of at least one group.

➤ When NOT using LDAP, a user may be a member of multiple groups.

➤ When using LDAP, a user may only be a member of ONE group.

➤ Before creating groups, users, and sessions, the administrator needs to list what users need Host On-Demand access and what sessions they need. Can they be separated into groups? Do they need to be able to modify session options?

➤ The first time HOD Administrator might be interested in looking at the Online Help "Basic Configuration Steps" document, and the Online Help Contents item "Administration Tasks".

HOD Admin (cont.)

➤ When a user or group session is modified by a user, the changed session is saved as a user session. After a user logs on they are presented with an icon for each session defined for the group they are in and each individual session defined for the user.

➤ One potential issue exists if users are allowed to define their own sessions or modify inherited sessions.

➤ A user who modifies a session inherited from a group level definition now has a local "instance" of that session. This may present a help desk problem since neither the help desk nor the user can differentiate the two sessions should the user subsequently have reason to call in for assistance.

Host On-Demand:
Client

Host On-Demand Client

➢ Host On-Demand Client is supported on the following platforms:

- ➢ Windows 95 R2, 98, ME, NT 4.0 with SP5, 2000 Professional, Server, Advanced Server, and XP

- ➢ IBM AIX V4.3.3, V4.3.4, V5.1

- ➢ OS/2 Warp Server 4

- ➢ Sun Solaris V2.6, V2.7, V2.8

- ➢ HP-UX V10.20, V11.00

- ➢ Redhat Linux V6.2, V7.0, V7.1

- ➢ SUSE Linux V6.4, V7.0, V7.1

- ➢ Caldera OpenLinux V2.3

- ➢ TurboLinux V6.0, V6.1

- ➢ Windows Terminal Server V4

- ➢ Windows Terminal Services

- ➢ IBM Netstation V2.1.0

Note: Host On-Demand Local Client only supported on Windows 95, 98, NT, 2000.

HOD Client (cont.)

➤ Host On-Demand Client is supported on the following browsers:

  ➤ Netscape Navigator 4.6, 4.7, and 6.0

    ➤ Supported on Windows and Unix

  ➤ Netscape Navigator 4.61, IBM Mozilla

    ➤ Supported on OS/2

  ➤ Microsoft Internet Explorer 4.01 with SP1, 5.0, 5.1, 5.5, or 6.0

    ➤ JVM level 3165+ required.

  ➤ Java Plugin 1.3 Required for Java2

    ➤ From Sun or IBM

HOD Client (cont.)

➤ The first time HOD end user might be interested in looking at the Online Help Contents item "User Tasks".

➤ HTML page that end user enters or selects in browser determines what Host On-Demand Client is downloaded.

➤ Sessions defined for the Host On-Demand userid (as group or individual sessions) are presented as icons, or optionally buttons, or automatically launched after the Client code is downloaded.

➤ Sessions may be defined in the HTML, with no Host On-Demand userid required.

   ➤ Without a userid the session changes cannot be saved on the server. There would be no way to indicate which changes were associated with which end user.

   ➤ Without a userid the session changes can be saved on the local client.

HOD Client (cont.)

➤ Types of Host On-Demand Clients

To access a HOD client use a browser to open http://*hod_server*/hod/*htmlpage*, where *hod_server* is the IP address or host name of the HOD server and *htmlpage* is HODMain.html (which lists all the clients) or one of the following to access one of the clients directly:

Function	Client	HTML Page
Administrator	Administrator	HODAdmin.html
	Administrator cached	HODAdminCached.html
	Administrator cached w/ problem determination	HODAdminCachedDebug.html
Emulator Client	Cached	HODCached.html
	Cached w/ problem determination	HODCachedDebug.html
	Download	HOD.html
	Download w/ problem determination	HODDebug.html
	Download w/ Screen Customizer/LE Interface	HODCustom.html
	Function On-Demand	HODThin.html
Database Client	Database	HODDatabase.html
	Database cached	HODDatabaseCached.html
	Database cached w/ problem determination	HODDatabaseCachedDebug.html
Utilities	Remove Cached Client	HODRemove.html
	New user	NewUser.html
	New user cached	NewUserCached.html
	New user cached w/ problem determination	NewUserCachedDebug.html

HOD Client (cont.)

➤ NOTE:

 ➤ Security warning windows may appear when accessing the Host On-Demand server. The purpose of the windows is to indicate that Host On-Demand was created by International Business Machines and ask whether you trust it.

 ➤ Taking down the browser will take down all Host On-Demand sessions.

 ➤ Host On-Demand makes a standard Java API call to get the ID for the logged on user. For Microsoft IE this happens to be the Windows login. For Netscape, if a user profile has been setup it is the name of the user profile. This is the name that appears as the Host On-Demand userid on the Host On-Demand login screen.

HOD Client (cont.)

➢ NOTE:

> ➢ The download client will not run on a workstation with the cached client installed. If the cached client is installed it must be removed before the download client can be used. Remove the cached client with the HODRemove.html page. A message window indicating that the Cached Client must be removed has been added by Host On-Demand V6.

HOD Client (cont.)

➤ The cached client loads faster than the others, and is therefore the recommended client.

➤ Locally-installed client can be installed from the CD on Windows 95, 98, 2000, NT 4.0 with SP3 or later.

  ➤ To start locally-installed client:

     Click Start, Programs, IBM Host On-Demand, Host On-Demand

➤ For more information about Host On-Demand clients see the Host On-Demand "Planning and Installation Guide" also known as "Getting Started".

HOD Client (cont.)

➤ **AutoHODxxx.html**

  ➤ There are some AutoHODxxx.html files, that correspond to some of the HODxxx.html files, that launch the session automatically instead of having to double click the icon. They are located in the "publish" directory (default is /usr/lpp/HOD/hostondemand/HOD).

➤ **Session 1 and Session 2**

  ➤ HTML sample files that can be copied to the "publish" directory and customized:

  ➤ Session 1 is like AutoHOD.html with these added capabilities:

    ➤ Save the userid and password in the HTML page.

    ➤ Launch the session automatically instead of having to double click the icon.

    ➤ Run the session embedded in the browser window or in a separate window.

    ➤ Change session icons into buttons.

    ➤ /usr/lpp/HOD/hostondemand/HOD/en/doc/samples/html/session1.html.ascii

  ➤ Session 2 is also like AutoHOD.html with these added capabilities:

    ➤ No userid and password required, which means that settings cannot be saved.

    ➤ /usr/lpp/HOD/hostondemand/HOD/en/doc/samples/html/session2.html.ascii

HOD Client (cont.)

➤ Clients can get parameters from the following places:

   ➤ HTML parameters

   ➤ config.properties.ascii

   ➤ udparams.txt.ascii

   ➤ params.txt.ascii

   The above order is the order of preference. Parameters found

   in HTML override parameters in config.properties, etc.

HOD Client (cont.)

- HTML

  - The Deployment Wizard on the Host On-Demand for Windows V6 CD may be used to create HTML pages or the HTML may be edited manually.

  Note: The Deployment Wizard is the recommended way of creating and editing HTML pages.

- Deployment Wizard

  - A wizard-driven administration tool that provides easy planning and configuration of sessions, administration options, and deployment methods.

  - See Online Help Contents item "Administration Tasks, Sessions, Creating an HTML file for starting sessions".

HOD Client (cont.)

➤ Edit HTML pages

➤ After HTML pages are edited (with or without Deployment Wizard) on non-OS/390 platform, they must be binary FTPed to the OS/390 Host On-Demand Publish Directory.

➤ When HTML files are FTPed to the OS/390 Host On-Demand server for the first time the permission bits setting on the file created in OMVS may not allow the use of the HTML page. You may need to change the permission bits to something usable, like 644.
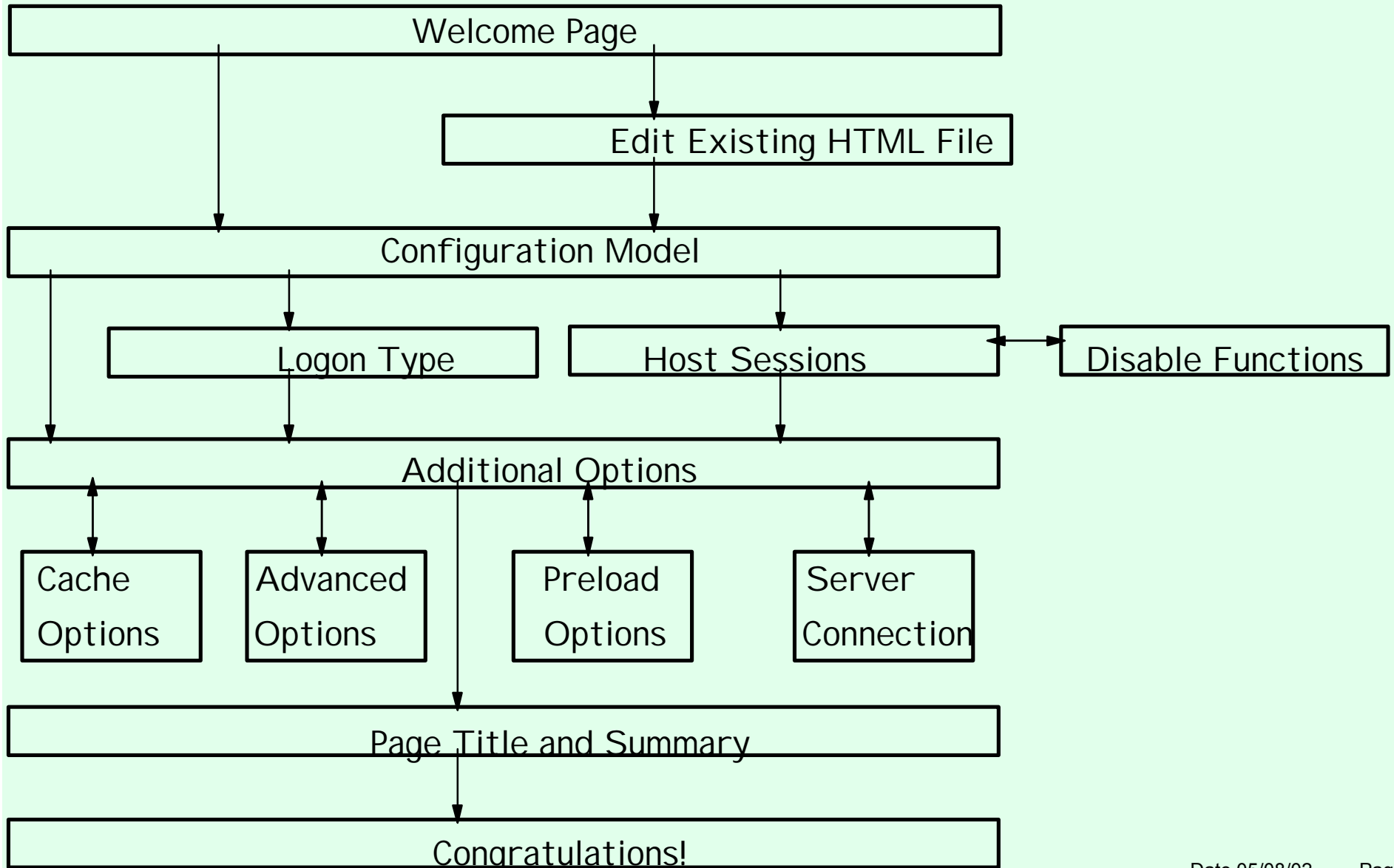
```
chmod u=rw /usr/lpp/HOD/hostondemand/HOD/test.html.ascii
chmod g=r /usr/lpp/HOD/hostondemand/HOD/test.html.ascii
chmod o=r /usr/lpp/HOD/hostondemand/HOD/test.html.ascii
```

➤ HTML pages are in ASCII (even on OS/390).

Deployment Wizard

Deployment Wizard

➤ Deployment Wizard panel flow:

```
┌─────────────────────────────────────────────────────────┐
│                      Welcome Page                        │
└─────────────────────────────────────────────────────────┘
                             │
                             ▼
              ┌──────────────────────────────────┐
              │      Edit Existing HTML File      │
              └──────────────────────────────────┘
                             │
┌─────────────────────────────────────────────────────────┐
│                  Configuration Model                     │
└─────────────────────────────────────────────────────────┘
```

Logon Type	Host Sessions	Disable Functions

```
┌─────────────────────────────────────────────────────────┐
│                  Additional Options                      │
└─────────────────────────────────────────────────────────┘
```

Cache Options	Advanced Options	Preload Options	Server Connection

```
┌─────────────────────────────────────────────────────────┐
│                 Page Title and Summary                   │
└─────────────────────────────────────────────────────────┘
                             │
                             ▼
┌─────────────────────────────────────────────────────────┐
│                    Congratulations!                      │
└─────────────────────────────────────────────────────────┘
```

Deployment Wizard

➢ If the Deployment Wizard is used to create an HTML page, two HTML files and a subdirectory structure with multiple files in it are created in one zip file. This zip file must be binary FTPed to the Host On-Demand Server and unzipped, or all the files, preserving the subdirectory structure (this must be created on the server), must be binary FTPed to the Host On-Demand Server. The files must be put in the publish directory (the default is /usr/lpp/HOD/hostondemand/HOD) on the Host On-Demand Server and the HTML files and (if there are any) .txt files must have the .ascii extension added. There is no .ascii extension required on .cf and .obj files.

➢ If the Deployment Wizard is used to create a set of files, as described above, and then any of the files are manually edited without the Deployment Wizard, and then the Deployment Wizard is used to edit the set of files, all manual editing will be lost.

Deployment Wizard

➤ As an example, if the Deployment Wizard created file HODTest1.html, you might end up with the following files on OS/390:

➤ Main HTML

/usr/lpp/HOD/hostondemand/HOD/HODTest1.html.ascii

➤ Bookmark

/usr/lpp/HOD/hostondemand/HOD/AutoHODTest1.html.ascii

➤ NetScape V6 main HTML - for cached client only

/usr/lpp/HOD/hostondemand/HOD/HODTest1_J2.html.ascii

➤ NetScape V6 Bookmark - for cached client only

/usr/lpp/HOD/hostondemand/HOD/AutoHODTest1_J2.html.ascii

➤ HTML params

/usr/lpp/HOD/hostondemand/HOD/HODData/HODTest1/params.txt.ascii

➤ Preloads

/usr/lpp/HOD/hostondemand/HOD/HODData/HODTest1/preloads.obj

➤ Additional parameters - not always created

/usr/lpp/HOD/hostondemand/HOD/HODData/HODTest1/udparams.txt.ascii

Deployment Wizard

➤ Internal information - not used by the client

/HOD/HODData/HODTest1/wInfo.txt

➤ Session configurations - for HTML Model only

/usr/lpp/HOD/hostondemand/HOD/HODData/HODTest1/cfg0.cf

➤ Disabled functions - for HTML Model only

/usr/lpp/HOD/hostondemand/HOD/HODData/HODTest1/policy.obj

➤ File that is created by the Deployment Wizard that is not required on the server:

➤ Deployment Wizard log

/HOD/HODWizard.log

Deployment Wizard (cont.)

➤ Deployment Wizard Pages:

  1. "Welcome to Host On-Demand Deployment Wizard"

    ➤ "Do you want to create or edit an HTML file?"

      Select "Create a new HTML file" or "Edit an existing HTML file"

    ➤ And then Click "Next"

  2. "Connection Options"

    ➤ "Use the Configuration Server"

      Select "Yes" or "No"

      ➤ If "Yes" then "Do you want to use the Configuration Servlet?"

        Select "Yes" or "No"

        ➤ If "Yes" then enter "Configuration Servlet URL"

        For example /iphost/servlet/hodconfig/hod (where "iphost" is either the

        IP address or hostname of the Configuration Server)

        ➤ If "No" then enter "Configuration Server Port"

        For example 8999

    ➤ And then Click "Next"

    ➤ If "Use the Configuration Server" = "No" then skip to 4

Deployment Wizard (cont.)

➢ Deployment Wizard Pages (cont.):

　3. "Logon Options"

　　➢ "Require users to logon?"

　　　Select "Yes" or "No"

　　　➢ If "No" then enter "User ID to automatically logon as" and "Password for this user ID"

　　➢ And then Click "Next"

　4. "Additional Options"

　　➢ "Allow users to save session changes?"

　　　Select "Yes" or "No"

　　➢ "Cache Host On-Demand applet?"

　　　Select "Yes" or "No"

　　➢ "Include problem determination components?"

　　　Select "Yes" or "No"

　　➢ And then Click "Next"

　　➢ If "Cache Host On-Demand applet" = "No" then skip to 9

Deployment Wizard (cont.)

➤ Deployment Wizard Pages (cont.):

5. "Cache Client Options"

➤ "Debug cached client installation process?"

Select "Yes" or "No"

➤ "Where will the components be installed from?"

Select "Web server" or "CD/Network Drive"

➤ "Enter the size of the progress indicator frame"

Enter "Width" (default 550) (options 300, 350, 400, 450...800)

Enter "Height (default 250) (options 150, 200, 250, 300, 350, 400)

➤ And then Click "Next"

Deployment Wizard (cont.)

➢ Deployment Wizard Pages (cont.):

    6. "Cache Client Upgrade Options"

      ➢ "When an upgrade version of cached client is available"

        Select "Allow all users to upgrade", "Don't allow any users to upgrade", or "Control user upgrades"

        ➢ If "Control user upgrades" then select "Percent of users who can upgrade at a time" or "Only allow upgrade if specified file contains the word upgrade"

          ➢ If "Percent of users who can upgrade at a time" then enter the percentage (default 100) (options 10, 20, 30...100)

          ➢ If "Only allow upgrade if specified file contains the word upgrade" then enter "URL to file"

      ➢ Select "Upgrade in foreground", "Upgrade in background", or "Prompt user"

      ➢ And then Click "Next"

      ➢ If "Use the Configuration Server" = "Yes" then skip to 9

Deployment Wizard (cont.)

➢ Deployment Wizard Pages (cont.):

7. "Host Sessions"

   ➢ Define Sessions

   ➢ And then Click "Next"

8. "HTML Level Policy Configuration"

   ➢ Enable or disable functions

   ➢ And then Click "Next"

9. "Display Options"

   ➢ Select "Standard Host On-Demand Client" or "Grid of Buttons"

   ➢ Enter "Applet size" (default Large) (options Autosize, Small, Medium, Large)

   ➢ Enter "Maximum number of concurrent sessions per user" (default 26) (options 1 to 26)

   ➢ And then Click "Next"

10. "Preload Configuration"

    ➢ Select the components to include in the initial download

    ➢ And then Click "Next"

Deployment Wizard (cont.)

➤ Deployment Wizard Pages (cont.):

   11. "Page Title and Summary"

      ➤ Enter Bookmark page title

      ➤ And then Click "Next"

   12. "Create HTML"

      ➤ Select Path for file to be saved

      ➤ Enter "File Name"

      ➤ And then Click "Create"

   13. "Congratulations!"

      ➤ Click "Restart Wizard" to create or edit more HTML files, or click "Close" to exit the Deployment Wizard

Edit HTML Files

Edit HTML

➢ To be able to edit the OS/390 file it must be converted to EBCDIC or sent to another platform like Windows 95:

  ➢ To edit on OS/390:

    1. In OMVS issue the following command, all on one line:
       ```
       iconv -f IBM-932 -t IBM-1047
       /usr/lpp/HOD/hostondemand/HOD/en/doc/samples/html/session1.html.ascii >

       /u/user1/session1.html
       ```

    2. Edit /u/user1/session1.html from the OS/390 ISHELL.

    3. In OMVS use the iconv command again to "publish" the html page, all on one line:
       ```
       iconv -f IBM-1047 -t IBM-932 /u/user1/session1.html >

       /usr/lpp/HOD/hostondemand/HOD/session1.html.ascii
       ```

  ➢ To edit on Windows 95:

    1. FTP the file in binary to a Windows 95 workstation.

    2. Edit the file with Windows Notepad or WordPad.

    3. FTP the file in binary to the "publish" directory (default is /usr/lpp/HOD/hostondemand/HOD).

Edit HTML (cont.)

➤ The following parameter must be changed:

`<PARAM NAME="Host" VALUE="">`

to add the IP Address or Hostname of the TN3270 Server, ie.:

`<PARAM NAME="Host" VALUE="9.82.1.100">`

to be able to use the following HTML files properly:

AutoHOD.html.ascii

AutoHODCached.html.ascii

AutoHODCachedDebug.html.ascii

AutoHODCustom.html.ascii

AutoHODDebug.html.ascii

AutoHODThin.html.ascii

session2.html.ascii

Edit HTML (cont.)

➤ The following parameters must be changed:

`<PARAM NAME="User" VALUE="">`

`<PARAM NAME="Password" VALUE="">`

to add the userid and password of the Host On-Demand user, ie.:

`<PARAM NAME="User" VALUE="huser1">`

`<PARAM NAME="Password" VALUE="u1pass">`

to be able to use the following HTML file properly:

session1.html.ascii

Edit HTML (cont.)

➢ The following parameters may be changed:

`<PARAM NAME="User" VALUE="">`

`<PARAM NAME="Password" VALUE="">`

to add the userid and password of the Host On-Demand user, ie.:

`<PARAM NAME="User" VALUE="huser1">`

`<PARAM NAME="Password" VALUE="u1pass">`

to skip the logon prompt when using the following HTML files:

HOD.html.ascii

HODCached.html.ascii (without quote marks)

HODDebug.html.ascii

HODThin.html.ascii

Edit HTML (cont.)

➤ The following parameters may be added:

`<PARAM NAME="CachedClient" VALUE="true">`

to add change the client to a cached client when using the following HTML files:

session1

session2

➤ Please see Online Help Contents item "Administration Tasks, Sessions, Session parameters" and Online Help Index item "cached client parameters, setting" for HTML parameters.

Host On-Demand

Functions

Host On-Demand Functions

➤ Following this section are sections that describe each Function in more detail.

Function Type	Section
Admin	Admistrator Functions
Client	Client Functions
Both	Administrator and Client Functions
Session	Session Functions
Properties	Session Properties
Java	Java Support
Print	Print Support
Prob Det	Problem Determination
SC	Screen Customizer
SSL	*

➤ *TN3270E SSL is detailed in the "TN3270E Secure Sockets Layer (SSL) and IBM WebSphere Host On-Demand V6 on OS/390 and z/OS" presentation on this web site.

HOD Functions (cont.)

Function	Release	Type
AIX Auto Install	5.0.0	Admin
AS/400 Toolbox Mod 2	5.0.0	Admin
AS/400 Toolbox Mod 4	6.0.0	Admin
APAR Update Utility	5.0.0	Admin
Blink Atribute	5.0.0	Session
Bookmark Session	All	Session
Cached Client Load from CD/Network Drive	All	Admin
Cached Client Support Across the Internet	6.0.0	Client
Change Password	All	Admin
Check Version	All	Both
Color Remap, improved	5.0.0	Session
Componentization	5.0.0	Admin
Configuration Servlet	5.0.0	Admin
Cut/Copy/Paste Support	All	Session
Cut/Copy/Paste Improvements	5.0.0	Session
Copying Sessions More Easily	6.0.0	Admin
Create Accounts, Allow Users to	All	Admin
Cursor Movement On Mouse Click, Enable/Disable	All	Client
Database On-Demand	All	Session

HOD Functions (cont.)

Function	Release	Type
Database On-Demand File Upload	5.0.3	Session
Default HOD Logon Userid	All	Client
Deployment Wizard	5.0.0	Admin
Deployment Wizard Enhancements	6.0.0	Admin
Directory Utility	5.0.3	Admin
EHLLAPI	All	Admin
ENPTUI Support	5.0.0	Session
Express Logon Feature (ELF)	5.0.0	SSL
File Transfer	All	Session
FTP Client	5.0.3	Session
Integrated Windows Domain Logon (Windows Single Signon)	6.0.0	Admin
Java 2 Platform Support	5.0.0	Java
JVM 1.3 Support on Server	6.0.0	Java
Java2-Enabled Browsers Support	6.0.0	Java
Keyboard Remap	All	Session
Keyboard Remap, Improved	5.0.0	Session
Licenses for HOD	All	Admin
Lightweight Directory Access Protocol (LDAP) Support	All	Admin
Macro/Applet Support	All	Session

HOD Functions (cont.)

Function	Release	Type
Macro, Launch Emulator Session	5.0.3	Session
Menu Usability, Improved	5.0.0	Session
Multiple Session Launch Support	5.0.0	Admin
Native Authentication	5.0.0	Admin
Online Help	All	Both
OS/400 Proxy Server	All	Admin
Policy Management and Feature/Function Disable	5.0.0	Admin
Printer Support	All	Print
Printer Definition File Support in Windows	5.0.0	Print
Print Support, Native Windows	6.0.0	Print
OS/400 PDT Compiler	All	Admin
Problem Determination/Troubleshooting	All	Prob Det
Problem Determination, Tracing	All	Prob Det
Problem Determination, Debug Code Parameter	All	Prob Det
Problem Determination, Improved Error and Status Indicators	5.0.0	Prob Det
Problem Determination, IP Monitor	6.0.0	Prob Det
Redirector	All	Admin
Screen Customizer	All	SC
Screen Customizer, Default GUI	All	Admin

HOD Functions (cont.)

Function	Release	Type
Secure Sockets Layer (SSL)	All	SSL
Service Location Protocol	All	Admin
Session Properties, Lock	All	Properties
Session Properties (Preferences), Saving	All	Properties
Session Properties, Locally-Stored User Preferences Enhancements	6.0.0	Properties
Smart Cache	5.0.0	Admin
Smart Card Support and Other Security Enhancements	5.0.3	SSL
Telnet-negotiated Security	5.0.0	SSL
Toolbar Buttons	All	Session
Toolbar, Customize	6.0.0	Session
Toolkit CD Package	5.0.0	Admin
Translation (Code Pages) Support	All	Admin
Translation (Code Pages) Enhancements	5.0.0	Admin
Translation (Code Pages), Basic Support for GB18030	6.0.0	Admin
Translation (Code Pages), Greek Translation	6.0.0	Admin
User-Defined Character (UDC) Mapping Editor for DBCS Environments	6.0.0	Admin
User Filter	All	Admin
VT Support Enhancements	5.0.0	Session

Administrator Functions

Administrator Functions

- ➤ **AIX Auto Install**
  - ➤ Not applicable for OS/390 and z/OS Host On-Demand Server
  - ➤ Host On-Demand Server automated install on AIX platform

- ➤ **AS/400 Toolbox Support**
  - ➤ HOD V4 used MOD 1 of the AS/400 Toolbox
  - ➤ HOD V5 uses MOD 3 of the AS/400 Toolbox
    - ➤ File Transfer for AS/400 and Database On-Demand enhanced to support:
      - ➤ Proxy Server
      - ➤ Enhanced security (SSL)
  - ➤ HOD V6 uses MOD 4 of the AS/400 Toolbox
    - ➤ 5150 and Database On-Demand File Transfer
    - ➤ BIDI support

Admin Functions (cont.)

➤ **APAR Update Utility**

➤ Not applicable for OS/390 and z/OS Host On-Demand Server

➤ Set of tools for creating and applying "patches" on an existing HOD installation

➤ **Cached Client Load from CD/Network Drive**

➤ Deployment Wizard

➤ To the question "Where will the components be installed from?", select "CD/Network Drive" instead of "Web server".

➤ See the Host On-Demand "Planning and Installation Guide" also known as "Getting Started", Chapter 8 "Loading the Host On-Demand clients", section "Cached clients", subsection "Installing the Cached client".

➤ **Change Password**

➤ The Host On-Demand password may be changed when logging onto the Host On-Demand server unless "User cannot change password" has been selected for the userid.

Admin Functions (cont.)

- ➤ Componentization (Preload Options)
  - ➤ Cached Client reduced download size possible. Download only the features desired.
  - ➤ Deployment Wizard
    - ➤ Select the desired download features on the "Preload Configuration" page.
    - ➤ If the client tries to use a feature that has not been downloaded then the feature will be downloaded at that time.
  - ➤ Edit HTML Files with a Text Editor
    - ➤ Use the PreloadCodeModules parameter in the HTML. See Online Help Index item "cached client parameters, setting".
    - ➤ If the client tries to use a feature that has not been downloaded then the error "Results in class not found exception" will occur.

Admin Functions (cont.)

➤ Configuration Servlet

  ➤ Optional servlet to eliminate configuring specific ports (ie. 8999) to a firewall. When used with WebSphere Application Server, it allows Host On-Demand to use the HTTP or HTTPS ports exclusively for Host On-Demand server configuration traffic (TN3270 port is still required for TN3270 session host connectivity). This allows Host On-Demand to be easily deployed across the Extranet, with no firewall restrictions.

  ➤ It must be installed on a Web Application Server that supports the Java Servlet 2.0 API. The OS/390 WebSphere Application Servers V1R2, V3R02, and V3R5 are supported (V4 will be supported by HOD V6.01).

  ➤ The Host On-Demand clients connect to the Configuration Servlet using port 80 (or configured port) and the Configuration Servlet connects to the Host On-Demand server using port 8999 (or the configured port).

  ➤ See the Online Help Index item "configuring the Configuration Servlet".

  ➤ See the Online Help Index item "Configuring Host On-Demand with an IBM firewall" for directions about using Host On-Demand through a firewall without the Configuration Servlet.

  ➤ continued on next page

Admin Functions (cont.)

➤ Configuration Servlet (cont.)

➤ I did the following on my system which has WebSphere Application Server V1.2:

1. I added the following to my was.config file "ncf.jvm.classpath=" statement:

   `/usr/lpp/HOD/hostondemand/lib/cfgsrvlt.jar`

2. I also added the following statement to my was.config file:
   `servlet.hodconfig.code=com.ibm.eNetwork.HODUtil.services.remote.HODCfgServlet`

3. I did not add the following to my httpd.conf file because it was already there:

   `Service /servlet/* /usr/lpp/WebSphere/AppServer/lib/libadpter.so:AdapterService`

4. I copied HOD.html.ascii to HODCServ.html.ascii.

5. I added the following to HODCServ.html.ascii:

   `<PARAM NAME=ConfigServerURL VALUE=9.82.1.100/servlet/hodconfig/hod>`

   Where 9.82.1.100 is the IP address or hostname of the Configuration Server.

Admin Functions (cont.)

➤ Configuration Servlet (cont.)

➤ I did the following on my system which has WebSphere Application Server V3.02:

1. I added the following to my was.config file:

```
deployedwebapp.HOD.host=default_host
# rooturi must match pathname on Service statement in httpd.conf:
deployedwebapp.HOD.rooturi=/servlet
# The following three lines are all on one line with no spaces:
deployedwebapp.HOD.classpath=/usr/lpp/servlets:/usr/lpp/HOD/hostondemand/l
    ib/cfgsrvlt.jar:/usr/lpp/HOD/hostondemand/HOD:/usr/lpp/java/J1.1/lib/cl
    asses.zip
deployedwebapp.HOD.documentroot=/usr/lpp/HOD/hostondemand/lib
webapp.HOD.jspmapping=*.jsp
webapp.HOD.jspmapping=*.jhtml
webapp.HOD.jsplevel=1.0
webapp.HOD.filemapping=/
# URL to servlet by code name or servletmapping alias listed below:
# The following two lines are all on one line with no spaces:
webapp.HOD.servlet.HODConfigServlet.code=com.ibm.eNetwork.HODUtil.services.remot
    e.HODCfgServlet
webapp.HOD.servlet.HODConfigServlet.servletmapping=/hodconfig
# The following two lines are all on one line with no spaces:
webapp.HOD.servlet.HODConfigServlet.initargs=ConfigServer=127.0.0.1,ConfigServ
    erPort=8999,ShowStats=true,Trace=true
webapp.HOD.servlet.HODConfigServlet.autostart=true
```

Admin Functions (cont.)

Configuration Servlet (cont.)

2. I added the following to my httpd.conf file:

```
Service /servlet/* /usr/lpp/WebSphere/AppServer/bin/was302plugin.so:service_exit
Service /*.jsp /usr/lpp/WebSphere/AppServer/bin/was302plugin.so:service_exit

EnableFRCA off
```

3. I copied HOD.html.ascii to HODCServ.html.ascii.

4. I added the following to HODCServ.html.ascii:

```
<PARAM NAME=ConfigServerURL VALUE=servlet/hodconfig/hod>
```

Admin Functions (cont.)

➢ Configuration Servlet (cont.)

➢ I did the following on my system which has WebSphere Application Server V3.5:

1. I added the following to my was.config file:

```
deployedwebapp.HOD.host=default_host
# rooturi must match pathname on Service statement in httpd.conf:
deployedwebapp.HOD.rooturi=/servlet
# The following five lines are all on one line with no spaces:
deployedwebapp.HOD.classpath=/usr/lpp/was35/servlet:/usr/lpp/HOD/hoston
    demand/lib/cfgsrvlt.jar:/usr/lpp/HOD/hostondemand/HOD:/usr/lpp/java/I
    BM/J1.3/bin:/usr/lpp/HOD/hostondemand/HOD/com/ibm/eNetwork/HODUtil/serv
    ices/remote:/usr/lpp/HOD/hostondemand/HOD/com/ibm/eNetwork/HOD:/usr/lp
    p/java/IBM/J1.3/lib/rt.jar
deployedwebapp.HOD.documentroot=/usr/lpp/HOD/hostondemand/lib
deployedwebapp.HOD.autoreloadinterval=100000
webapp.HOD.jspmapping=*.jsp
webapp.HOD.jspmapping=*.jhtml
webapp.HOD.jsplevel=1.0
webapp.HOD.filemapping=/
# URL to servlet by code name or servletmapping alias listed below:
# The following two lines are all on one line with no spaces:
webapp.HOD.servlet.HODConfigServlet.code=com.ibm.eNetwork.HODUtil.serv
    ices.remote.HODCfgServlet
webapp.HOD.servlet.HODConfigServlet.servletmapping=/hodconfig
# The following two lines are all on one line with no spaces:
webapp.HOD.servlet.HODConfigServlet.initargs=ConfigServer=127.0.0.1,ConfigServ
    erPort=8999,ShowStats=true,Trace=true
```

Admin Functions (cont.)

Configuration Servlet (cont.)

Where /usr/lpp/was35 is where my WAS 3.5 code is mounted.

2. I added the following to my httpd.conf file:

```
Service /servlet/* /usr/lpp/was35/AppServer/bin/was350plugin.so:service_exit
Service /*.jsp /usr/lpp/was35/AppServer/bin/was350plugin.so:service_exit

EnableFRCA off
```

3. I copied HOD.html.ascii to HODCServ.html.ascii.

4. I added the following to HODCServ.html.ascii:

```
<PARAM NAME=ConfigServerURL VALUE=servlet/hodconfig/hod>
```

Admin Functions (cont.)

- Create Accounts, Allow Users to
  - Customize NewUser.html provided in the "publish" directory to allow end users to create Host On-Demand userids.
  - See the Online Help Index item "account, creating your own user".
  - continued on next page

Admin Functions (cont.)

➤ Optionally provide multiple copies of the file with different file names and customize different group names in the HTML. Use the httpd.conf PROTECTION and PROTECT to allow only group coordinators to create Host On-Demand userids in a particular group:

```
Protection Acct_Co {

        ServerId        Accounting_Coordinator

        AuthType        Basic

        PasswdFile      %%SAF%%

        Mask            CSMITH,csmith

}

Protect /NewAcctUser.* Acct_Co

Protection Admin_Co {

        ServerId        Administration_Coordinator

        AuthType        Basic

        PasswdFile      %%SAF%%

        Mask            EJONES,ejones

}

Protect /NewAdminUser.* Admin_Co
```

Admin Functions (cont.)

➤ **Deployment Wizard**

  ➤ A wizard-driven administration tool that provides easy planning and configuration of sessions, administration options, and deployment methods.

  ➤ See Appendix B in this presentation and Online Help Contents item "Administration Tasks, Sessions, Creating an HTML file for starting sessions".

  ➤ Deployment Wizard Enhancements in V6

    ➤ Simpler Flow

➤ **Directory Utility**

  ➤ Add, update and delete users, groups and sessions by a command line Java application.

  ➤ Uses ASCII file in XML format to manage configuration information.

  ➤ Supports Host On-Demand's User Preferences Private Data Store or LDAP.

  ➤ See Online Help Index item "Directory Utility, using the".

Admin Functions (cont.)

➤ EHLLAPI Enablement Tool

  ➤ Allows users to run existing EHLLAPI applications using a variety of interfaces on HOD emulator sessions.

  ➤ Available from the Download section of the Host On-Demand Home Page.

Admin Functions (cont.)

➤ Integrated Windows Domain Logon (Windows Single Signon)

  ➤ Log onto Windows domain controller.

  ➤ Windows username is used as a key to store customization in the Configuration Server.

  ➤ No Host On-Demand logon prompt.

  ➤ Useful when end users are logging on from multiple workstations rather than saving customizations locally.

  ➤ In the Deployment Wizard select the "Configuration server-based model" and "Automatically log users on to Host On-Demand using their Windows username".

  ➤ Parameters in params.txt or HTML:

    UseWindowsDomain=true

    WindowsDomain="domain name"

    HODUserMustExist=true/false

    WDHODGroup="HOD group name" (only HODUserMustExist=false)

Admin Functions (cont.)

➤ Licenses for Host On-Demand

  ➤ License-Use Statistics may be enabled or displayed on the Licenses page of the Administrator Client.

  ➤ See the Online Help Contents item "Administration Tasks, License usage".

Admin Functions (cont.)

➤ Lightweight Directory Access Protocol (LDAP) Support

  ➤ LDAP can be defined instead of Host On-Demand's User Preferences Private Data Store by selecting "Use Directory Service" on the Directory Service page of the Administrator Client.

  ➤ Already defined Users/Groups/Sessions can be migrated to the LDAP by selecting "Migrate Configuration to Directory Service" on the Directory Service page of the Administrator Client.

  ➤ There is no service to migrate LDAP definitions to Host On-Demand's User Preferences Private Data Store.

  ➤ Host On-Demand supports LDAP Directory Servers:

    ➤ Netscape Directory Server V3.1 and V4.0 on NT or AIX

    ➤ OS/390 LDAP Server on OS/390 V2R5 through R10

    ➤ IBM SecureWay LDAP Server V2.1

    ➤ IBM LDAP Directory Server V3.1.1

      ➤ IBM schema pre-installed

  ➤ See the Program Directory, and the Host On-Demand "Planning and Installation Guide" also known as "Getting Started".

Admin Functions (cont.)

➤ **Multiple Session Icon/Launch**

  ➤ After defining sessions they may be defined in a Multiple Session Icon on the Users/Groups page of the Administrator Client.

  ➤ See Online Help Index item "multiple session icon overview".

➤ **Native Authentication**

  ➤ Native Authentication enables users to logon to the Host On-Demand server using the same password they use when logging onto OS/390.

  ➤ This requires LDAP.

  ➤ "Use Native Authentication" may be selected per userid.

  ➤ See the Program Directory and the Online Help Index item "authentication, using native".

➤ **OS/400 Proxy Server**

  ➤ Not applicable for OS/390 and z/OS Host On-Demand Server

  ➤ So that only one port is opened through the firewall when transferring files to an AS/400 system.

Admin Functions (cont.)

➤ Policy Management and Feature/Function Disable

 ➤ Allows administrators to control, via policies, which features are available to which users, as well as completely disable, through the menus, toolbar and other areas, any feature. A feature that has been disabled via the Policy Management does not appear at all in the menus, toolbar and other areas, unlike when an item is "locked" and it appears but is "greyed out".

 ➤ Deployment Wizard

 ➤ Create HTML files with features/functions disabled. You must select "Use the Configuration Server" = "No", for use without the Configuration Server (Service Manager), to be able to disable features/functions. Without the Service Manager no session preference changes may be saved to the Service Manager (the Host On-Demand server), only to the local PC.

 ➤ Edit HTML Files with a Text Editor

 ➤ Use the Disable parameter in the HTML. See Online Help Index item "disabling functions through HTML files".

Admin Functions (cont.)

➤ OS/400 PDT Compiler

  ➤ java -classpath xxxx com.ibm.eNetwork.ECL.print.PdtCompilerApplication "mypdf.pdf" "my pdf description"

  ➤ First uncomment NONGUI_COMMAND:

    ➤ NONGUI_COMMAND='yourpdfname.pdf "Your PDF description"'

    ➤ $JAVA_ENGINE -classpath $MY_PUBLISHED_DIRECTORY com.ibm.eNetwork.ECL.print.PdtComplierApplication $NONGUI_COMMAND

Admin Functions (cont.)

➤ Redirector

  ➤ Configure Host On-Demand Server to "redirect" session to a TN3270 server.

  ➤ Hides TN3270 real IP address and port from end users.

  ➤ SSL is not supported by the Host On-Demand/390 Server Redirector. The only way to enable SSL between the client and the HOD/390 Server is to use the Configuration Servlet and the HTTP Server SSL support. A TN3270 session between a HOD client and a TN3270 server will use SSL if the TN3270 session has SSL defined and the TN3270 server supports it, whether or not the session is redirected.

  ➤ See Online Help Contents items "Administration Tasks, Redirector", and "User Tasks, Sessions, Configuring to connect to the Redirector".

Admin Functions (cont.)

➢ Screen Customizer Defualt GUI

➢ Screen Customizer is a thin Java client that automatically converts host screens into a graphical presentation.

➢ A Limited Edition version of Screen Customizer (Screen Customizer/LE), also referred to as the default GUI, is included in all the Host On-Demand clients and can be turned on in the session configuration panels but cannot be customized. The separate Screen Customizer product is required for customization.

➢ See the Screen Customizer for OS/390 and z/OS presentation (listed in "Other Presentations" section at the end of this presentation)

Admin Functions (cont.)

- ➤ Service Location Protocol (SLP)
  - ➤ Not applicable for OS/390 and z/OS Host On-Demand Server
  - ➤ Enables client to dynamically locate TN3270 and TN5250 server, and connect to the least-loaded server.
- ➤ Smart Cache
  - ➤ Cache client updates take place in the background, while the older cached code is used for the current session.
  - ➤ Deployment Wizard
    - ➤ Select "Upgrade in background" or "Prompt user" instead of "Upgrade in foreground".
  - ➤ Edit HTML Files with a Text Editor
    - ➤ There will be a prompt unless the UpgradePromptResponse parameter is coded in the HTML. See the Online Help Index item "cached client parameters, setting".

Admin Functions (cont.)

➤ IBM Host Access Toolkit

➤ Provided on CD for Windows 95, 98, NT 4.0 with SP3 or higher, and 2000.

➤ Includes the following support:

➤ Host Access Class Libraries (HACL) for Java

➤ Allows the development of platform-independent applications that can access host information without the need for a graphical display.

➤ Host Access Beans for Java

➤ Beans that use HACL libraries.

➤ J2EE Connector

➤ Based on J2EE Connector Architecture Specification version 1.0 Proposed Final Draft #2.

➤ ActiveX support the same as PComm

➤ continued on next page

Admin Functions (cont.)

➤ IBM Host Access Toolkit (cont.)

  ➤ Bean Builders (HACL and Host Access Beans for Java) supported on:

    ➤ IBM VisualAge for Java V3.0 and V3.5, V4.0

    ➤ WebGain (formerly Symantec) Visual Cafe Professional Development Edition V4.0, V4.1

    ➤ Borland/Inprise JBuilder V3.5, V4.0

  ➤ The following documentation is available from the "IBM Host Access Toolkit" directory after Toolkit installation:

    ➤ Getting Started (also available from first CD panel)

    ➤ Host Access Class Library Reference

    ➤ Host Access Beans for Java Reference

    ➤ Open Host Interface Objects Reference

Admin Functions (cont.)

➤ **Translation (Code Pages) Support**

➤ Detailed in the Host On-Demand "Planning and Installation Guide" also known as "Getting Started" and Online Help Contents item "National language support".

➤ Enhancements in V5

➤ Code page table support includes all the code pages currently supported by Personal Communications.

➤ Code pages added include: 1153 (Latin 2 Euro); 1154 (Cyrillic Euro); 1155 (Turkey Euro); 1156 (Estonia Euro); 1158 (Cyrillic Ukraine Euro); 1160 (Thai Euro); 1364 (Korean Euro); 1371 (Taiwan Euro); 1390 (Japan Katakana Euro); and 1399 (Japan Latin Euro).

➤ Code pages modified to enable the Euro Currency Symbol include: 420 (Arabic); 424 (Israel); 803 (Israel); and 875 (Greece).

➤ Enhancements in V6

➤ Support for DBCS GB18030-2000 code page (GB18030 phase 1 only)

➤ Greek translation

➤ User-Defined Character (UDC) Mapping Editor for DBCS Environments

Admin Functions (cont.)

➤ User Filter

    ➤ There is a "Disable User Filter" check box on the Users/Groups page of the Administrator Client. When selected all userids will be displayed. When unselected a filter may be used to only display a subset of userids. The userids are case sensitive so filter a* will display userid "admin" but filter A* will not.

Host On-Demand

Functions

Client Functions

➤ Cached Client Support Across the Internet

  ➤ Prior to HOD V5.0.4 it is recommended to not use the Cached Client if there is a requirement to access multiple HOD Servers at differing levels of HOD.

  ➤ New support in HOD V5.0.4

    ➤ HOD V5.0.4 or higher cached client can connect to multiple HOD V5.0.4 or higher server

➤ Enable/Disable Cursor Movement On Mouse Click

  ➤ When mouse is clicked in the Presentation Space of a VT session the mouse movement support is configurable.

  ➤ Configurable in the VT Display panel of the Session setup

➤ Default HOD Logon Userid

  ➤ HOD logon panel comes up with a default userid filled in.

  ➤ HOD makes a standard Java API call to get the ID of the logged on user.

    ➤ For Microsoft IE this happens to be the Windows login ID.

    ➤ For Netscape, if a user profile has been setup it is the name of the user profile.

Administrator and Client Functions

Server and Client Current Functions

➤ Check Version

- ➤ ASCII file with the Host On-Demand Server installed version listed is:

    `/usr/lpp/HOD/hostondemand/lib/.version`

- ➤ ASCII file with the Screen Customizer Server installed version listed is:

    `/usr/lpp/customizer/customizer/.version-sed`

- ➤ Host On-Demand Client Version information is displayed in Client java console.

➤ Online Help

- ➤ In addition to the documentation provided with the product, listed in the Bibliography, there is extensive online help available when using HTML pages.

- ➤ If you click on the ? that appears in the top right corner of the window, after clicking on a Help button or when viewing some of the Help documents, the Online Help documents will then be accessible under a Contents tab and Index tab. Throughout this presentation the items listed under the Contents and Index tabs are mentioned for further information.

Session Functions

Session Functions

➤ **Blink Attribute**

➤ 3270 and 5250 Blink Attribute. Similar to VT Blink Attribute.

➤ See the Online Help Index item "attributes, setting the display".

➤ **Bookmark Session**

➤ See Online Help Contents item "User Tasks, Sessions, Bookmarking".

➤ **Cut/Copy/Paste**

➤ See Online Help Contents item "User Tasks, Sessions, Cut, copy and pasting text in a session".

➤ Enhancements in V5.0.0

➤ New panels for advanced copy and paste functionality

Session Functions (cont.)

➤ **Database On-Demand**

 ➤ Java applet to perform SQL requests to AS/400 databases through a JDBC driver.

 ➤ Netscape 6.x requires more than 128MB RAM on Win2K.

 ➤ Optional Auto Execution of Saved SQL Statements at logon.

 ➤ See the Online Help Contents item "Administration Tasks, Database On-Demand".

➤ **Database On-Demand File Upload**

 ➤ Graphical Interface for uploading entire files from client to host database.

 ➤ Manipulates database data specifically.

 ➤ Provides for different File Upload statement types.

 ➤ Uploads numerous file formats.

 ➤ Connects to any database using a Java Database Connectivity (JDBC) driver.

 ➤ Different than AS/400 File Upload feature and SQL Wizard.

Session Functions (cont.)

➤ **Enhanced Non-Programmable Terminal User Interface (ENPTUI) Support**

　➤ 5250 (AS/400) Host Graphics

　➤ Enhance over the 5250 full screen menu driver user interface

　➤ DBCS and Thai support

➤ **File Transfer**

　➤ Host File Transfer Function

　　➤ Does not use FTP.

　➤ FTP Client

　　➤ Standard FTP Client to upload files, download files and navigate directories on remote FTP server and the local file system.

　➤ See Online Help Contents item "User Tasks, File Transfer".

Session Functions (cont.)

➢ **Keyboard Remap**

  ➢ Provides a panel to see which keys are mapped and what options are available for remap.

  ➢ See Online Help Contents items "User Tasks, Sessions, Remapping the keyboard" and "User Tasks, Sessions, Specifying keys to not repeat".

  ➢ Enhancements in V5.0.0

   ➢ Provides a more extensive panel to see which keys are mapped and what options are available.

➢ **Macro/Applet Support**

  ➢ See the Online Help Contents item "User Tasks, Macro Manager".

➢ **Macro, Launch Emulator Session**

  ➢ Use a macro to launch an emulator session while using Host On-Demand with Screen Customizer/LE (default GUI) or Screen Customizer product.

Session Functions (cont.)

➤ **Menu Usability, Improved**

 ➤ Menus have more of a Windows look and feel with consistent terminology.

➤ **Toolbar buttons**

 ➤ Add, edit, remove, or insert spacer.

 ➤ Button types:

   Applet, Application, URL, Macro, File, Edit, View,

   Communication, Action, Help

➤ **Toolbar, Customize**

 ➤ Add, edit, remove, insert spacer, set to default

 ➤ Administrator can disable customization

➤ **VT Support Enhancements**

 ➤ 100/200 Enhancements

 ➤ History Wingow

 ➤ Greater than 24 line support

 ➤ Print

Session Properties

Session Properties

➤ Session Properties, Lock

  ➤ Session properties may be individually "locked" when the session is created.

  ➤ If session properties are not locked (or disabled) they can be modified by the user.

    ➤ Session colors can be remapped.

    ➤ Light Pen Mode can be enabled.

    ➤ An Applet can be run.

    ➤ A Macro can be saved or run.

  ➤ Even if users have changed previously unlocked properties in the past, when a property is locked it will always take the Administrator's value.

  ➤ See Online Help Contents item "User Tasks, Sessions".

➤ Saving Preferences

  ➤ User modifications to session properties will be saved unless "Do not save preferences" is selected on the userid.

  ➤ A shared HOD userid can be created with "Do not save preferences" and "User cannot change password" selected. The password may even be blank.

Session Properties (cont.)

➤ Locally-Stored User Preferences on Local PC

  ➤ Session customization changes done by the user may be saved to the local PC rather than back on the server. In this way, one standard session can be created with or without a userid. Every user that uses that session may customize it and the changes will be saved locally and only effect them.

  ➤ Save Cached Client Session Properties on Local PC:

  Use the Deployment Wizard to create a definition with "Use

  the Configuration Server"="No" and "Allow users to save session

  changes?"="Yes".

  Note: The file permissions must be 666.
```
chmod u=rw /usr/lpp/HOD/hostondemand/HOD/test.html.ascii
chmod g=rw /usr/lpp/HOD/hostondemand/HOD/test.html.ascii
chmod o=rw /usr/lpp/HOD/hostondemand/HOD/test.html.ascii
```

Session Properties (cont.)

➤ Save Download or Locally Installed Client Session Properties on Local PC:

Use the Session 2 HTML file. On Locally Installed Client copy

C:\hostondemand\lib\doc\samples\html\session2.html to

C:\hostondemand\lib\test1.html

(where test1.html is the name you want to use).

See the Online Help Index item "applet tag parameters".

➤ When using Internet Explorer, user changes are saved using the Internet Explorer userid so multiple users can share a workstation and at the same time use their own customizations.

Session Properties (cont.)

Set the following parameters in the HTML:

```
<PARAM NAME="SessionName"     VALUE="">
<PARAM NAME="Host"            VALUE="">
<PARAM NAME="SessionType"     VALUE="">
<PARAM NAME="SessionID"       VALUE="">
<PARAM NAME="Save"            VALUE="">
<PARAM NAME="Config"          VALUE="">
<PARAM NAME="ConfigDefault"   VALUE="">

<PARAM NAME="ConfigOverwrite" VALUE="">
```

ie.:

```
<PARAM NAME="SessionName"     VALUE="mvsnm2">
<PARAM NAME="Host"            VALUE="9.82.1.100">
<PARAM NAME="SessionType"     VALUE="1">
<PARAM NAME="SessionID"       VALUE="A">
<PARAM NAME="Save"            VALUE="text2.txt">
<PARAM NAME="Config"      VALUE="http://127.0.0.1/hod/text2.txt">
<PARAM NAME="ConfigDefault"   VALUE="true">
<PARAM NAME="ConfigOverwrite" VALUE="true">
```

Session Properties (cont.)

➤ Deployment Wizard Models

   ➤ HTML Model - Default configurations are located in the HTML and user changes are saved on the local machine.

   ➤ Configuration Server Model - Default configurations are defined in a Group on the Configuration Server and user changes are stored in the User on the Configuration Server.

   ➤ Combined Model - Default configurations are defined in a Group on the Configuration Server and user changes are saved on the local machine.

➤ HTML Model and Combined Model pages will still work if the page has been browsed before so that local preferences have been saved to the local machine, even if the Configuration Server is down.

Session Properties (cont.)

➤ Add a "Save" directory in the user-defined parameters section of the Deployment Wizard to save session customization changes in a location other than the browser default location.

"Save=<save directory>"

ie. "Save=c:\userprefs"

➤ Different browsers can share preferences if the "Save" directory has been defined.

Note: If a "Save" directory has been specified that does

not exist on the client workstation an error will pop up

saying "Host On-Demand has encountered an error while

trying to load or save session configuration information."

➤ To remove all user customization changes, locate the folder associated with the web page. If the web page is TestPage.html then locate the folder TestPage. If the folder contains .cf and .df files then deleting the whole folder will remove all user customizations. Delete the .df file that contains "name=TestPage" if this is the only session you want to remove user customizations from.

Java Support

Java Functions

➢ JDK 1.2 (Java 2) in HOD V5

➢ JavaBeans and HACL applications compile and run using a JDK 1.2 JVM and run using a JRE 1.2 JVM.

➢ SDK 1.3 with HOD V6 is preferable

➢ No support for ServiceManager.sh in JDK 1.2

➢ ServiceManager.sh requires JDK 1.1.8

➢ JVM 1.3 (Java 2) in HOD V5.0.4

➢ ServiceManager.sh runs in Java Runtime Environment (JRE) 1.3

Java Functions (cont.)

➤ Java2-Enabled Browsers Support in HOD V6

  ➤ Java2 enabled web browsers:

    ➤ Netscape 6.x - Windows, Linux, Solaris

    ➤ Mozilla - many others

    ➤ Warpzilla - OS/2

    ➤ Netscape 4.x and IE and Java2 plugin with custom HTML

  ➤ Via a "Plug-in" on the following platforms:

    ➤ Win32

    ➤ Linux

    ➤ OS/2

    ➤ AIX

    ➤ Solaris

  ➤ Java Runtime Environment (JRE) required.

  ➤ See "Getting Started" Appendix D and "Readme".

Java Functions (cont.)

➤ HTML parameter option to change JVM minimum checking done (Internet Explorer only):

   `<PARAM NAME=JVM_Minimum VALUE=3165>`

➤ Database On-Demand with Netscape 6 on Windows 2000 requires more than 128MB of RAM.

Print Support

Printer Support

➤ **Printer Support**

  ➤ Screen Print

    ➤ You can print a screen.

    ➤ See Online Help Contents item "User Tasks, Printing, Printing the screen".

  ➤ Host Print

    ➤ You can print host application files on a printer that is directly attached to your workstation or to a network printer.

    ➤ See the "Host Print Reference" and the IP Customization and 3270 Host Print section of this presentation.

    ➤

Printer Support (cont.)

- Host Print (cont.)
  - Java File Interface Mode
    - 3270, 5250, VT sessions.
    - All platforms (client does not need to be Windows).
    - Same support as earlier versions.
  - Printer Definition File Support
    - Windows client platform only.
    - Allows a user to access a printer from a client with a host print session PDT (3270/5250) or Model (5250).
    - Font cannot be specified.
    - See Online Help Contents item "Administration Tasks, Printing, Using a Windows printer".
  - continued on next page

Printer Support (cont.)

- ➤ Host Print (cont.)
  - ➤ Windows Native Printer Interface Mode (Native Windows Print)
    - ➤ 3270 session and Windows client platform only.
    - ➤ Requires Java Native Interface (JNI) Windows DLL.
      - ➤ Installed automatically by Host On-Demand.
      - ➤ hodtracetool.exe on HOD Windows CD for problem determination.
    - ➤ Printer may be configured like previous versions using a port name, like LPT1 or \\servername\printername.
    - ➤ Printer may be configured using printer icon name in Windows Printers folder, where names are more understandable, like "HP LaserJet 5P" or "IBM Proprinter III".
    - ➤ More print properties support, like font selection.
    - ➤ "Best Fit" option reduces font size so print data fits in the form.
    - ➤ Supports all Host Code Pages that 3270 Display supports.

Problem Determination

Problem Determination

➤ Troubleshooting

➤ For additional troubleshooting ideas see the Online Help index items "troubleshooting" and "aids, problem determination".

➤ Tracing

➤ Service Trace

➤ Start and stop a trace from the Services page of the Administrator Client.

➤ View Trace and Log data by clicking on "Server Log".

➤ User Trace

➤ Start a trace from the Debug Client. Select save location of "Local" or "Server".

➤ If the save location is "Local", view the Trace data in the "console" on the Debug Client.

➤ If the save location is "Server", view the Trace data by right mouse clicking the user and selecting "Trace Facility" on the Users/Groups page of the Administrator Client.

➤ Trace options can be defined in the HTML.

Problem Determination (cont.)

➤ Debug Code Parameter

    ➤ Specify DebugCode with value 65535 in Deployment Wizard additional parameters to display all configuration parameters in java console.

    ➤ If Internet Explorer traps before viewing java console, enable java logging and the contents of the java console will be written to /winnt/java/javalog.txt.

➤ Improved Error and Status Indicators

    ➤ See Online Help Contents item "User Tasks, Message help".

    ➤ Enhancements in V5.0.0

        ➤ Viewable status bar history

        ➤ Help text linked to status bar messages

        ➤ Additional status bar messages (similar to PComm)

        ➤ Fly-over tool button text

Problem Determination (cont.)

➤ **IP Monitor**

➤ Capture and playback of TCP/IP traffic between HOD client and session destination host.

   ➤ IPMonitor can run as an application

   ➤ IPMonitor can be launched from the "Run Applet..." menu item

      ➤ IPMonitor caption says "normal mode"

   ➤ IPMonitor can be launched from HTML file

      ➤ IPMonitor caption says "automatic mode"

      ➤ New in HOD V6

➤ See Online Help Contents item "IPMonitor".

Screen Customizer

Screen Customizer Overview

➤ IBM Screen Customizer V2.06 is part of the IBM Host Access Client Package.

  ➤ Announcement Letter 201-267

  ➤ Screen Customizer is a thin Java client that automatically converts host screens into a graphical presentation.

  ➤ A Limited Edition version of Screen Customizer (Screen Customizer/LE), also referred to as the default GUI, is included in all the Host On-Demand clients and can be turned on in the session configuration panels but cannot be customized. The separate Screen Customizer product is required for customization.

Screen Customizer

➤ There are three components of Screen Customizer:

  ➤ Administrator

    ➤ Capture host screens for customization.

    ➤ Identify screens and save as maps.

    ➤ Set global defaults and save in profile.

  ➤ Customization Studio

    ➤ Customize screens captured by Administrator.

  ➤ Client

    ➤ Default or customized graphical interface for host sessions.

➤ Only the Screen Customizer "Client" is supported on OS/390.

Screen Customizer (cont.)

➤ Screen Customizer Administrator is supported on:

  ➤ Host On-Demand (Server or locally-installed client)

  ➤ Personal Communications

➤ Screen Customizer Client is supported on:

  ➤ Host On-Demand Server

  ➤ Host On-Demand Client (not V2.0.6)

  ➤ Personal Communications (not V2.0.6)

➤ Screen Customizer Studio is supported on:

  ➤ Windows 95 R2, 98, 98SE, ME, NT (4.0 with SP5), and 2000 (Professional, Server, and Advanced Server)

➤ Note: Review Software Announcement Letter, for Personal Communication's limitations.

Screen Customizer (cont.)

➢ JDK 1.3 and Netscape 6.0 Support

  ➢ Default GUI and Client only.

  ➢ Administrator and Studio support will be provided by first CSD.

➢ Default GUI JAR File Change from V2.0.5 to V2.0.6 for Netscape V6.0

  ➢ Manually edit any custom HTML files to replace scbase.jar with sccbase.jar.

Screen Customizer (cont.)

➤ HOD V6.0 supports IBM Screen Customizer (CS) 2.0.6.

Program Temporary Fix (PTF) = Corrective Service Diskette (CSD)

CSD 2
APAR OW53217
PTF UW86306

➤ After a CSD has been installed mvscli.sh must be run.

Screen Cust V2.0.6 Base + CSD 2 = SC V2.0.62 (supported by HOD V6.02)

➤ CSD 1 was skipped.

➤ If the Screen Customizer product will be used, it is recommended that a separate data set be mounted at /usr/lpp/customizer/customizer/custom to avoid maintenance and migration issues.

Screen Customizer (cont.)

➢ HOD V5.0.5x supports IBM Screen Customizer (CS) 2.0.5x

➢ HOD V6.0.x supports IBM Screen Customizer (CS) 2.0.6x

➢ After SMP/E installation shell script mvscli.sh must be run.

➢ The mvscli.sh shell script requires the CLASSPATH defined
for java. I needed to add the following to the mvscli.sh file:
 export CLASSPATH=$CLASSPATH:/usr/lpp/java/J1.1/lib/classes.zip
 export PATH=$PATH:/usr/lpp/java/J1.1/bin

➢ After the mvscli.sh finishes look at the bottom of file
/usr/lpp/customizer/HODLink-UNIX-errors. The last two
lines must be the following or there were errors encountered:
 Linking HOD files.
 Done.

Screen Customizer (cont.)

➤ After install the Readme and "Planning and Installation"
("Getting Started") manuals are at URL:

    http://9.82.1.100/hod/en/doc/custom/readme/readme.html

    http://9.82.1.100/hod/en/doc/custom/install/installation.html

  (where 9.82.1.100 is the hostname or IP address of the HTTP Web Server)

There is also an installation.pdf in the directory:

/usr/lpp/customizer/customizer/en/doc/custom/

➤ Online Help is available after installing Screen Customizer on a
Windows platform:

Start, Programs, IBM Screen Customizer,

    Information Library, Online Help

Create Custom Files

➤ I Used Screen Customizer Administrator and Studio to Create Custom Files:

1. I installed Host On-Demand Locally-installed client on my Windows workstation.

2. Then I installed Screen Customizer Administrator and Studio.

3. Remove any cached client!

4. Then I used the Administrator and Studio to capture and customize screens, etc.

Copy Custom Files

➤ Copy Custom Files

   ➤ After installing Screen Customizer Client, copy customized files from a Windows Screen Customizer Administrator to OS/390.

   ➤ FTP the files of each subdirectory in C:\hostondemand\HOD\custom on the Windows Administrator to the OS/390 host in the /usr/lpp/customizer/customizer/custom directory. Files must be transferred in BINARY for all directories except "/lst" which must be transferred in ASCII.

   ➤ The .scm, .psd, and screen.db files are expected to be lower case on OS/390.

Copy Custom Files (cont.)

➤ In order to FTP the files you will need to create the subdirectories on OS/390 in the /usr/lpp/customizer/customizer/custom directory, ie.:

/usr/lpp/customizer/customizer/custom/lst

/usr/lpp/customizer/customizer/custom/map

/usr/lpp/customizer/customizer/custom/ps

/usr/lpp/customizer/customizer/custom/ref

/usr/lpp/customizer/customizer/custom/wsp

/usr/lpp/customizer/customizer/custom/img

/usr/lpp/customizer/customizer/custom/(lang)/help

Copy Custom Files (cont.)

➤ FTP the files (cont.)

  ➤ It is recommended that a separate data set be mounted at /usr/lpp/customizer/customizer/custom to avoid maintenance and migration issues.

  ➤ Set the permission bits to (7,5,5) for the subdirectories and (6,4,4) for the files.

```
chmod -R u=rw /usr/lpp/customizer/customizer/custom
chmod -R g=r /usr/lpp/customizer/customizer/custom
chmod -R o=r /usr/lpp/customizer/customizer/custom

chmod u=rwx /usr/lpp/customizer/customizer/custom
chmod g=rx /usr/lpp/customizer/customizer/custom
chmod o=rx /usr/lpp/customizer/customizer/custom
```

Copy Custom Files (cont.)

➤ If separate sets of customizations for different users/groups have been stored in replicas of the custom directory, these directories must also be copied to OS/390. Use the HTML subdir parameter:

<param name=subdir value=custom1>

Where custom1 is a symbolic link to the directory (just like the custom directory is).

ie. /usr/lpp/HOD/hostondemand/HOD/custom1 is a symbolic link to

/usr/lpp/customizer/customizer/custom/custom1

Screen Customizer Functions

➢ Functional Enhancements Added to Screen Customizer V2.0.0, as per Announcement Letter 200-324:

➢ Global customization enhancements — Control the look and function of many different emulator screens at once by creating templates that can be automatically combined with both mapped screens and non-mapped screens at runtime.

➢ Simplified screen capture process — Toolbar buttons to capture a screen, start the Studio, and work with screens IDs.

➢ Web link button improvements — Additional options have been added for Web link buttons. Text for links changes color when the mouse pointer is held over it, displaying a standard Web link. Settings can be saved for individual Web links.

➢ Light pen support — Use your mouse as a light pen when accessing host applications that require a light pen. Light pen fields can be displayed as check boxes or buttons, depending on the type of field.

➢ AS/400 subfiles — AS/400 subfile screens are automatically converted into multicolumn tables with button hotspots that send the appropriate commands for manipulating objects in the subfile list.

Screen Customizer Functions (cont.)

➤ Screen Customizer API — You can programmatically set properties for graphical interface objects and the data represented by the object (for example, buttons, valid values, button captions or choice options). This provides the ability to dynamically modify graphical components and data at runtime. The Screen Customizer API is documented in the SCCI Reference included with the Host On-Demand Host Access Toolkit.

➤ Screen Customizer bean — Use Screen Customizer within your own application or embedded directly into a Web page. The bean allows rapid application development with full capabilities to display customized screens. It is documented in the Host Access Beans for Java Reference included with the Host On-Demand Host Access Toolkit.

➤ Host On-Demand integration — Screen Customizer now reuses the function-rich Host On-Demand toolbar and keyboard remap facilities. Screen Customizer is also adding the ability to launch macros created in Host On-Demand.

➤ Auto install for AIX — Provides a GUI for installing Screen Customizer on AIX.

➤ Additional language support — Enablement for Hindi and Thai languages have been added. This product, however, does not translate Hindi and Thai languages.

Screen Customizer Functions (cont.)

➤ Functional Enhancements Added to Screen Customizer V2.0.3, as per Announcement Letter 201-053:

   ➤ Page Up/Page Down — Enables the page up and page down keys, along with the mouse, to scroll an application window effectively.

   ➤ Right Mouse Click — The addition of "What Is It" choice provides a direct link to information from the Help menu.

   ➤ Screen ID Sorting — Provides sorting and search capabilities to a list of Screen IDs. Customers with large lists can easily find the ID they are looking for.

Screen Customizer Functions (cont.)

➤ Functional Enhancements Added to Screen Customizer V2.0.6, as per Announcement Letter 201-267:

  ➤ Netscape V6.0 - The Customization Studio, Administrator, SCCI, and Screen Customizer Beans are only supported in Java Virtual Machine (JVM) 1.1.8 environments.

  ➤ Java2-Enabled Browsers - Clients are supported on Java2-enabled Web browsers, such as Netscape 6.x and Mozilla. The Java2 plug-in with Netscape 4.x and Microsoft Internet Explorer is also supported.

  ➤ Greek Translation - Screen Customizer is translated into Greek.

Host Publisher

for OS/390 and z/OS

Host Publisher Overview

➤ Host Publisher takes data from multiple sources, like 3270, 5250, VT, JDBC, and Java host applications, and presents the data in HTML Web pages for web access from even non-Java browsers.

➤ Host Publisher is detailed in the "IBM WebSphere Host Publisher V2R2 for OS/390 and z/OS" presentation on this web site.

Appendix A:
OS/390 TCPIP PROFILE Customization

IP PROFILE

➤ PROFILE TCPIP BEGINVTAM Statement Example

PORT 223

HNGROUP HNAMES1 andyh.washington.ibm.com patb.washington.ibm.com ENDHNGROUP

HNGROUP HNAMES2 **.bet.ibm.com ENDHNGROUP

IPGROUP IPNAMES1 255.255.240.0:9.82.0.0 ENDIPGROUP

IPGROUP IPNAMES2 9.82.130.4 9.82.1.161 ENDIPGROUP

IPGROUP IPNAMES3 255.255.224.0:9.82.128.0 ENDIPGROUP

IPGROUP IPNAMES4 9.82.1.2 9.82.1.10 ENDIPGROUP

LUGROUP NONHOD1 TCP20001..TCP20010 ENDLUGROUP

LUGROUP NONHOD2 TCP20011..TCP20020 ENDLUGROUP

LUGROUP HODLUG2 TCP20H01..TCP20H02 ENDLUGROUP

LUGROUP HODLUG3 TCP20H11..TCP20H20 ENDLUGROUP

LUGROUP HODLUG4 TCP20H21..TCP20H22 ENDLUGROUP

PRTGROUP PRTLUS1 TCP20P01..TCP20P10 ENDPRTGROUP

PRTGROUP PRTLUS2 TCP20P11..TCP20P12 ENDPRTGROUP

PRTGROUP PRTLUS4 TCP20P21..TCP20P22 ENDPRTGROUP

IP PROFILE (cont.)

PRTMAP PRTLUS1 IPNAMES1   ===> see section 1 below

LUMAP NONHOD1 HNAMES1   ===> see section 2 below

LUMAP NONHOD2 HNAMES2   ===> see section 3 below

LUMAP HODLUG2 IPNAMES2 SPECIFIC PRTLUS2   ===> see section 4 below

LUMAP HODLUG3 IPNAMES3   ===> see section 5 below

LUMAP HODLUG4 IPNAMES4 GENERIC PRTLUS4   ===> see section 6 below

1. If a printer session is initiated to port 223 from any IP address in the 9.82.0.0 subnet (mask 255.255.240.0), the first available LU will be assigned between TCP20P01 and TCP20P10.

2. If andyh or patb from domain washington.ibm.com telnets into port 223, the first available LU will be assigned between TCP20H01 and TCP20H10.

3. If any host from domain bet.ibm.com or any sub-domain (including tomv.bet.ibm.com and suej.rustbuck.bet.ibm.com) telnets into port 223, the first available LU will be assigned between TCP20H11 and TCP20H20.

IP PROFILE (cont.)

4. If 9.82.130.4 telnets to port 223 and requests LU TCP20H01, it will be assigned and a printer session with LU TCP20P11 will be initiated and associated with the host session. Likewise if 9.82.1.161 telnets to port 223 and requests LU TCP20H02, it will be assigned and a printer session with LU TCP20P12 will be initiated and associated with the host session.

5. If any IP address in the 9.82.128.0 subnet (mask 255.255.224.0) telnets into port 223, the first available LU will be assigned between TCP20H11 and TCP20H20.

6. If 9.82.1.2 telnets to port 223, the first available LU will be assigned between TCP20H21 and TCP20H22, and a printer session will be initiated and associated with the host session. Likewise if 9.82.1.10 telnets to port 223, the first available LU will be assigned between TCP20H21 and TCP20H22, and a printer session will be initiated and associated with the host session. Where TCP20P21 is the printer LU if the host LU is TCP20H21, and TCP20P22 is the printer LU if the host LU is TCP20H22.

Bibliography

Bibliography

➢ Announcement Letters:

➢ 200-324 IBM Host Access Client Package V1R0

➢ 201-053 IBM Host Access Client Package V1R1

➢ 201-267 IBM Host Access Client Package V2R0

➢ 200-262 IBM Host Publisher V2R2

➢ Program Directories:

➢ GI10-3175-00 IBM Host On-Demand Version 5 for System/390

➢ GI10-3191-00 IBM Host On-Demand Version 6 for System/390

➢ GI10-3176-00 IBM Screen Customizer Version 2.05 for System/390

➢ GI10-3207-00 IBM Screen Customizer Version 2.0.60 for System/390

Bibliography

➢ The following three documents are available after Host On-Demand installation (where 9.82.1.100 is the IP address of the OS/390 system where HOD is installed) and they are also available on the HOD Library page off of the Host On-Demand Home page:

 ➢ Host On-Demand Readme

   http://9.82.1.100/hod/en/doc/readme/readme.html

 ➢ Planning and Installation Guide (also known as "Getting Started")(also available in pdf as install.pdf)

   http://9.82.1.100/hod/en/doc/install/install.html

 ➢ Host Printing Reference

   http://9.82.1.100/hod/en/doc/hostprint/hostprintref.html

➢ The following four documents are available from the "IBM Host Access Toolkit" directory after Toolkit installation:

 ➢ Getting Started (also available from the Toolkit CD panel)

 ➢ Host Access Class Library Reference

 ➢ Host Access Beans for Java Reference

 ➢ Open Host Interface Objects Reference

Bibliography

➢ The following two documents are available after Screen Customizer installation (where 9.82.1.100 is the IP address of the OS/390 system where Screen Customizer is installed) and they are also available on the Screen Customizer Library page off of the Screen Customizer Home page:

  ➢ Screen Customizer Readme

    http://9.82.1.100/hod/en/doc/custom/readme/readme.html

  ➢ Planning and Installation Guide (also known as "Getting Started")(also available in pdf as installation.pdf)

    http://9.82.1.100/hod/en/doc/custom/install/installation.html

Bibliography

- The following Redbooks are available at http://www.redbooks.ibm.com:
  - IBM SecureWay Host On-Demand 4.0: Enterprise Communications in the Era of Network Computing, SG24-2149-01
  - IBM WebSphere Host On-Demand: Version 5 Enhancements, SG24-5989
  - IBM SecureWay Communications Server for OS/390 V2R8 TCP/IP: Guide to Enhancements, SG24-5631
  - IBM Web-to-Host Integration Solutions, SG24-5237
  - IBM Host Integration in a Secure Network: A Practical Approach, SG24-5988
- IBM OS/390 manuals:
  - Communications Server for OS/390, IP Configuration, SC31-8513
  - Communications Server for OS/390, IP Configuration Guide, SC31-8725
  - Communications Server for OS/390, IP Configuration Reference, SC31-8726
  - System Secure Sockets Layer (SSL) Programming Guide and Reference, SC24-5877
  - OS/390 Security Server (RACF) Command Language Reference, SC28-1919

Web Sites

Web Sites

➤ Host On-Demand Product Information site:

http://www.ibm.com/software/webservers/hostondemand

Select Support from the above Home Page to get to the Support Page.

Select Library from the above Home Page to get to the Library page.

➤ Screen Customizer Product Information site:

http://www.ibm.com/software/network/screencustomizer

Select Support from the above Home Page to get to the Support Page.

Select Library from the above Home Page to get to the Library page.

➤ This and other presentations are available on web site:

http://www.ibm.com/support/techdocs

PRS351 "IBM WebSphere Host On-Demand V6 for OS/390 and z/OS"

"TN3270E Secure Sockets Layer (SSL) and IBM WebSphere Host On-Demand V6
   on OS/390 and z/OS"

PRS352 "IBM WebSphere Host Publisher V2R2 for OS/390 and z/OS"

Web Sites

➢ IBM HTTP Server Product Information site:

  http://www.ibm.com/software/webservers/httpservers

➢ IBM HTTP Server SSL Examples:

  http://www.ibm.com/software/webservers/httpservers/gskkyman.htm