

# **QAD Desktop 2: Installation and Administration**

**TRAINING GUIDE**



70-2903B  
June 2004

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## QAD DESKTOP 2:INSTALLATION AND ADMINISTRATION

CHAPTER 1

# **System Overview**



## Course Overview


- Overview
- Web Components
- Desktop Components
- System Requirements
- UNIX Considerations
- NT Considerations
- URL Links
- Client Installation
- Processor Editor
- Multi-Systems
- Deployment
- Performance and Tuning
- Oracle Considerations
- Troubleshooting

DT2\_SO\_010

System Overview

QAD DESKTOP TRAINING

## Course Overview



## System Overview


QAD DESKTOP TRAINING

- Benefits
- Desktop User Interface
- Application Enhancements
- Infrastructure

DT2\_SO\_020

System Overview

## System Overview




## Benefits

QAD DESKTOP TRAINING

- Ease of accessibility
- Scalable
- Ease of client configuration and administration
- Consistent
- Customizable
- Deployment over intranets and extranets

DT2\_SO\_140System Overview

## Benefits



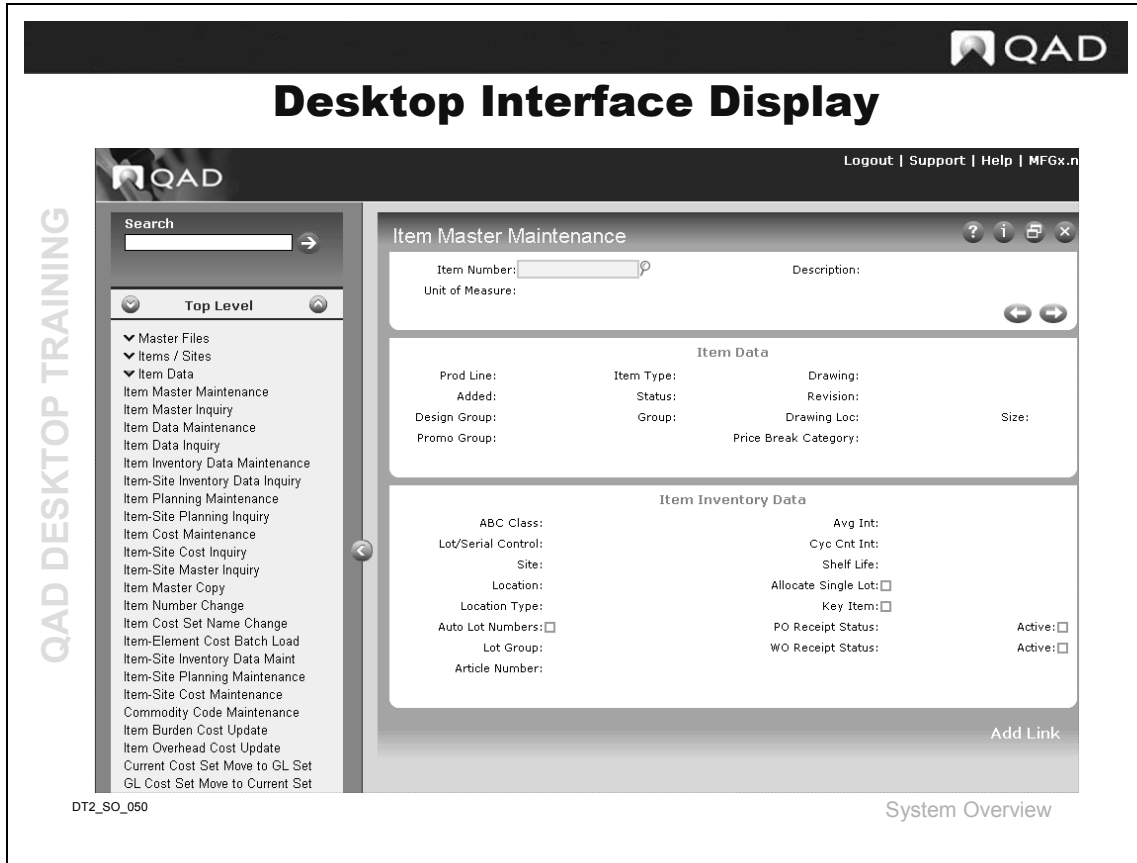
## Features

QAD DESKTOP TRAINING


- Geared towards the intranet user
- Create URL links
- Process Editor

DT2\_SO\_040 System Overview

**Features**

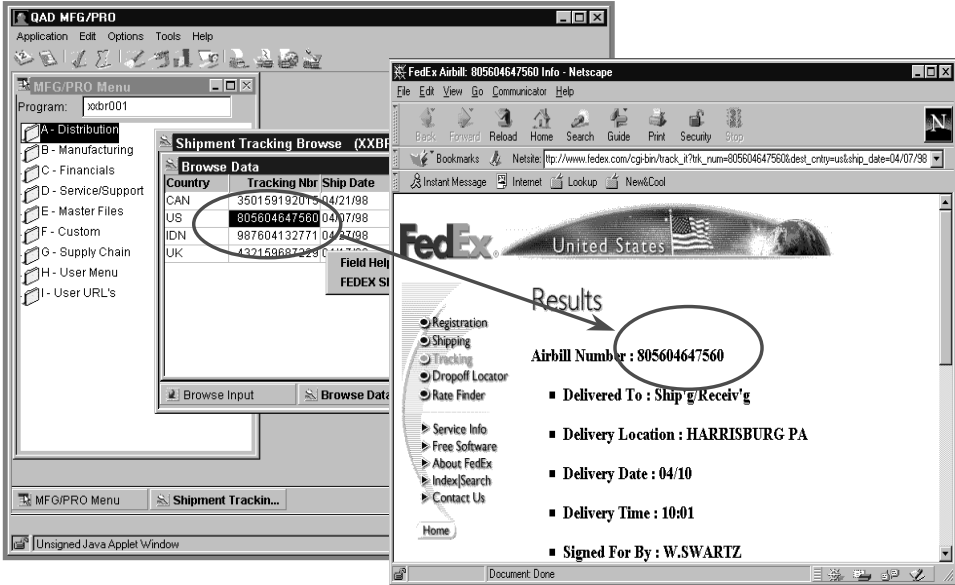


**Desktop Interface Display**



## Outbound URL Links

QAD DESKTOP TRAINING



Country	Tracking Nbr	Ship Date
CAN	350159192015	04/21/98
US	805604647560	04/17/98
IDN	987604132771	04/17/98
UK	432159667329	04/17/98


**Results**

**Airbill Number : 805604647560**

- Delivered To : Ship g/Receiv'g
- Delivery Location : HARRISBURG PA
- Delivery Date : 04/10
- Delivery Time : 10:01
- Signed For By : W.SWARTZ

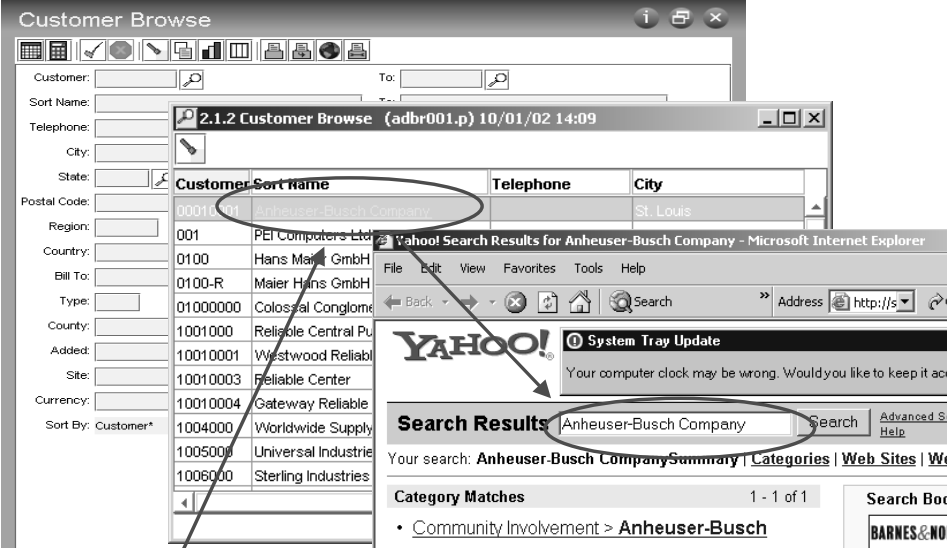
DT2\_SO\_060 System Overview

Desktop Interface Display, cont



## Outbound URL Links


QAD DESKTOP TRAINING



**Click on link**


DT2\_SO\_070 System Overview

**Desktop Interface Display, cont**



## Outbound URL Links

Item Browse 1 [ ] [ X ]



Item Number: <input type="text"/>	To: <input type="text"/>
Description: <input type="text"/>	To: <input type="text"/>
Description 2: <input type="text"/>	To: <input type="text"/>
Unit of Measure: <input type="text"/>	To: <input type="text"/>
Product Line: <input type="text" value="1000"/>	To: <input type="text" value="1000"/>
Rev: <input type="text"/>	To: <input type="text"/>
Drawing: <input type="text"/>	To: <input type="text"/>
Item Type: <input type="text"/>	To: <input type="text"/>
Status: <input type="text"/>	To: <input type="text"/>
Group: <input type="text"/>	To: <input type="text"/>

Sort By: Item Number\*

Sort Order  
 Ascending  
 Descending

Done...


Add Link

QAD DESKTOP TRAINING

DT2\_SO\_080

System Overview

**Desktop Interface Display, cont**




## Application Enhancements

QAD DESKTOP TRAINING

- Queries existing MFG/PRO code and receives description of how to present itself
- Simplifies web enabling customized or new MFG/PRO functionality
- Functionality is added to existing MFG/PRO character source code
- Process Editor for developing customized process flows

DT2\_SO\_090 System Overview

## Application Enhancements



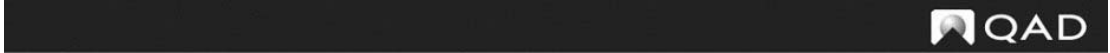
## Infrastructure

QAD DESKTOP TRAINING

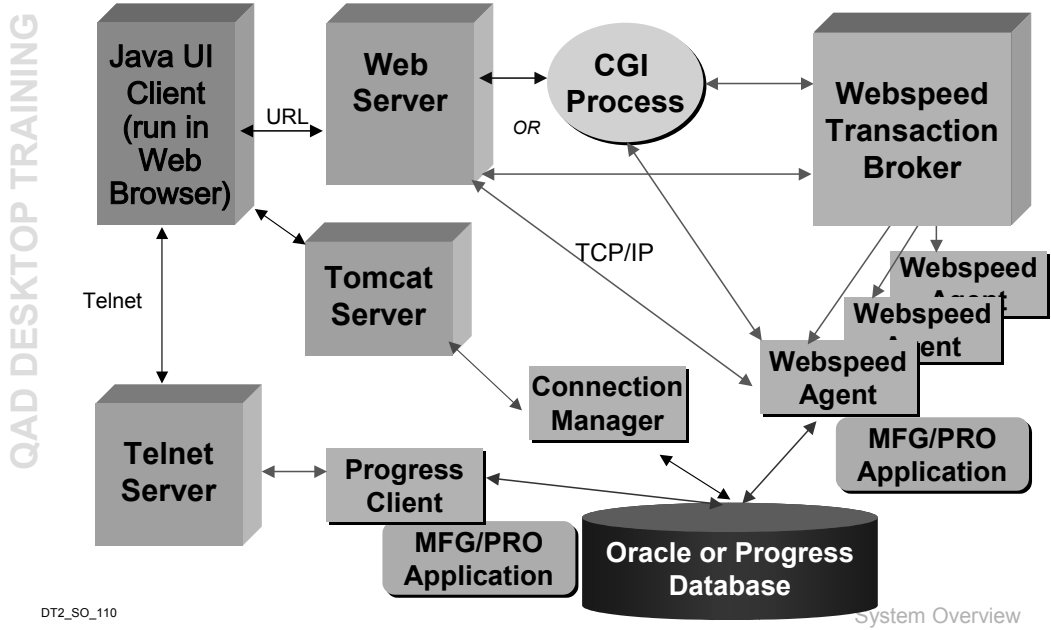
- Web Server
  - Any CGI-compatible HTTP Server
- Tomcat WebApp Server
- Progress WebSpeed Transaction Server
- Progress Character Client
- MFG/PRO Character Code
- ORACLE or PROGRESS database

DT2\_SO\_100System Overview


## Infrastructure



## Infrastructure



Infrastructure, cont.




## Infrastructure

QAD DESKTOP TRAINING

- **Java**
  - Scalable
  - Consistent
  - Distributable
- **Webspeed**
  - Scalable
  - Distributable
  - Simulates a PROGRESS client executing existing code
- **XML**
  - Provide consistent look & feel to MFG/PRO
  - Requires no modification to MFG/PRO code
  - Will work for custom code written to QAD standards

DT2\_SO\_120System Overview

### Infrastructure, cont.



## Infrastructure

QAD DESKTOP TRAINING

- Progress Character Client
  - Proven technology
  - Distributable per user
  - Executes existing code

DT2\_SO\_130 System Overview

**Infrastructure, cont.**



## Course Overview

QAD DESKTOP TRAINING

- ✓ Overview
- ◆ Web Components
- ◆ Desktop Components
- ◆ System Requirements
- ◆ UNIX Considerations
- ◆ NT Considerations
- ◆ URL Links
- ◆ Client Installation
- ◆ Processor Editor
- ◆ Multi-Systems
- ◆ Deployment
- ◆ Performance and Tuning
- ◆ Oracle Considerations
- ◆ Troubleshooting


DT2\_SO\_150





CHAPTER 2

# Web Components




## Overview

QAD DESKTOP TRAINING

- Terminology
- Web Browsers
- Web Servers
- WebSpeed
- Tomcat

DT2\_WC\_010Web Components

## Web Components Overview



## Network Terminology


QAD DESKTOP TRAINING

- Intranet – a private network inside a company
- Internet – a system of computer networks
- Extranet – a part of a company's network that is extended to users outside the company

DT2\_WC\_020Web Components

## Terminology

### Network Terminology




## Network Terminology

- TCP/IP - Transmission Control Protocol/Internet Protocol
- HTTP – Hypertext Transmission Protocol

DT2\_WC\_030 Web Components

**Network Terminology, cont.**




## Web Terminology

QAD DESKTOP TRAINING

- HTML – Hypertext Markup Language
- URL – Uniform Resource Locator
- HTML Documents – ASCII files containing HTML which the web server sends to the browser
- CGI – Common Gateway Interface

DT2\_WC\_040Web Components

## Web Terminology




## Java Terminology

QAD DESKTOP TRAINING

- **JAR File** - Java Archive File; a zip file that contains an optional META-INF directory
- **JVM** - Java Virtual Machine; enables cross-platform delivery
- **JRE** - Java Run-Time Environment (client file downloaded via desktop)

DT2\_WC\_050Web Components

## Java Terminology



## What is a Web Browser?


QAD DESKTOP TRAINING

- A program that connects to a web server over the internet to retrieve information from that system and display it on your machine
- Microsoft Internet Explorer is a web browser

DT2\_WC\_060Web Components

## Web Browsers

### What is a Web Browser



## What is a Web Server?

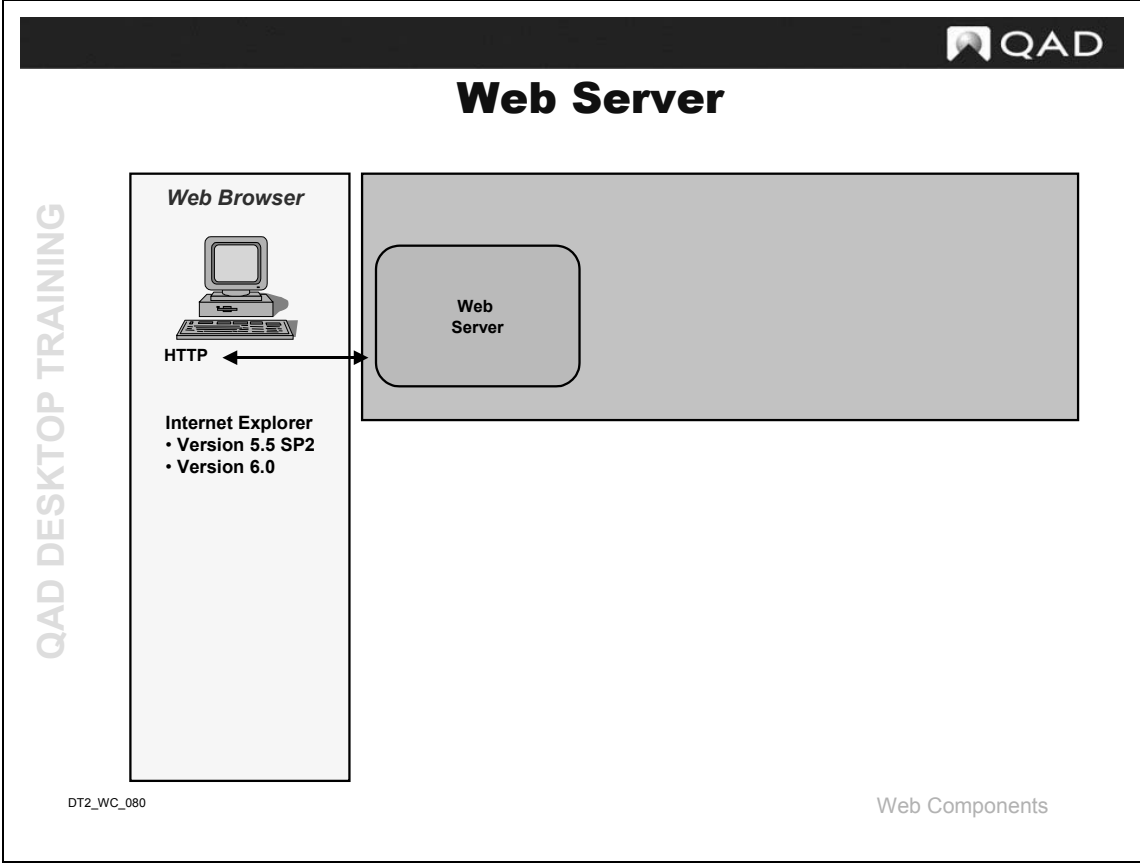
QAD DESKTOP TRAINING

- An application that handles requests for HTML information coming from the Internet or Intranet
- Examples:
  - Apache Web server
  - Netscape Enterprise
  - Microsoft Internet Information Server (IIS)


DT2\_WC\_070Web Components

## Web Servers

### What is a Web Server



**Web Server, cont.**




## Web Server Functionality

QAD DESKTOP TRAINING

- Default port is 80
- Requests
  - a URL with static HTML documents
  - output from a script
- Determines which type of request is coming in and where to get the return information from
- Mime type configuration may be required for WebServers other than Apache

DT2\_WC\_090Web Components

## Web Server Functionality




## Apache WebServer Example

QAD DESKTOP TRAINING

- Key Sub-directories
  - /bin (administration scripts)
    - “apachectl” script
    - “apachectl” options
      - Start
      - Stop
      - Restart
  - /logs (log files directory)
    - “error\_log”
  - /conf (configuration files directory)
    - “httpd.conf”

DT2\_WC\_100Web Components

## Apache WebServer Example




## Apache WebServer Example

QAD DESKTOP TRAINING

- Key Sub-directories (continued)
  - /htdocs (doc directory)
    - Desktop UI files
      - “js” directory
      - Search database
    - Desktop administration file
  - /cgi-bin (scripts directory)
    - Location for WebSpeed Messenger
    - Installation directory for Desktop scripts

DT2\_WC\_110 Web Components

**Apache WebServer Example, cont.**




## Web Server - Docs Directory

- Default HTML documents directory
- Key installation directory for QAD Desktop
- Example: The URL for a static document “index.html” called from the server “host01” would be: *http://host01/index.html*

DT2\_WC\_120 Web Components

### Web Server Docs Directory



## Web Server - Script Directory

QAD DESKTOP TRAINING

- Scripts or programs that generate output to the browser and make your web pages dynamic and interactive vs. Static HTML documents which just contain content.
- The requests are in the form of a URL with static HTML documents or output from a script.
- These programs are placed in a scripts directory on the web server so that they are run vs. Displayed like a document.

DT2\_WC\_130 Web Components

### Web Server Script Directory



## Web Server Directories - UNIX

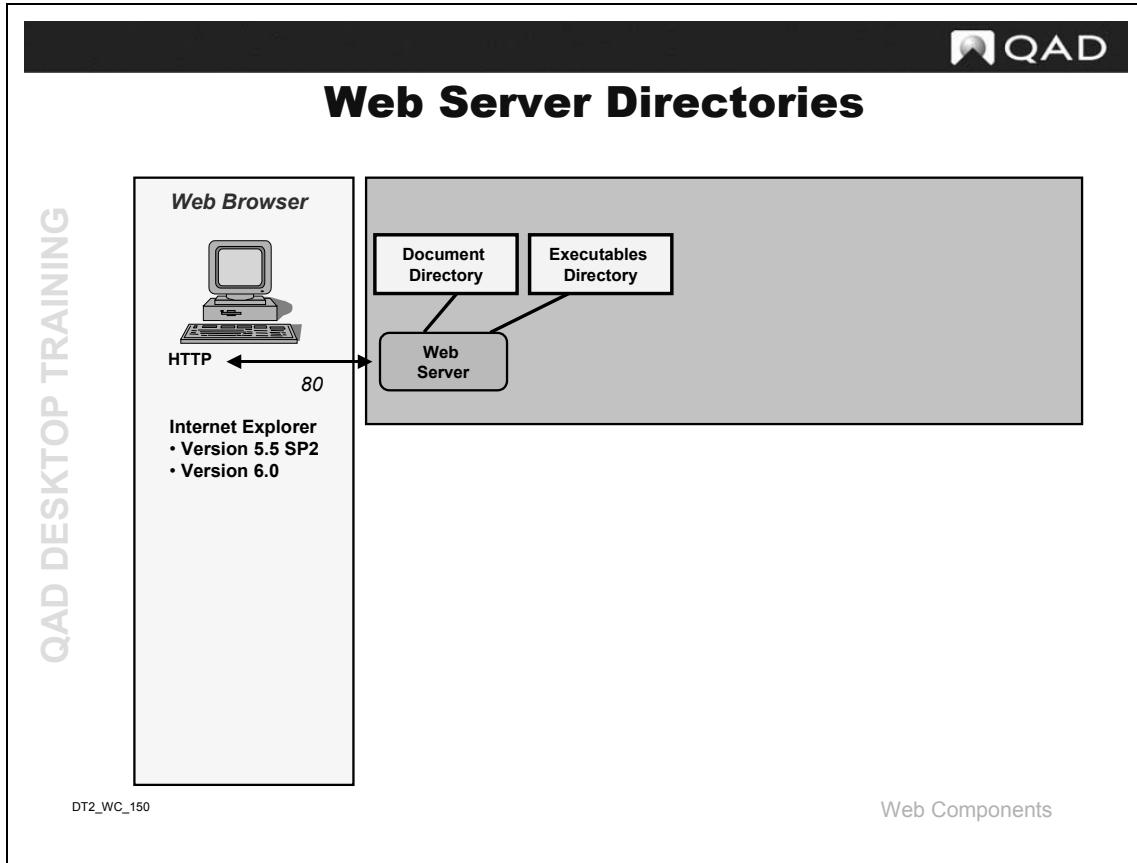
QAD DESKTOP TRAINING

- For Apache, the default location of the directories are:
  - /usr/local/apache/htdocs for documents
  - /usr/local/apache/cgi-bin for scripts
  - Read the Web Server's httpd.conf file for location

DT2\_WC\_140

Web Components

## Web Server Directories - UNIX



**Web Server Directories, cont.**



## Using the Apache WebServer


QAD DESKTOP TRAINING

- Startup the WebServer
  - “/bin/apachectl start”
- Verify the WebServer is running
  - Use browser
  - “http://server:80”
- Restart the WebServer
  - “/bin/apachectl restart”
- Stop the WebServer
  - “/bin/apachectl stop”

DT2\_WC\_160

Web Components

### Using Apache WebServer



## What is WebSpeed?


QAD DESKTOP TRAINING

- WebSpeed is a Progress development and deployment environment that enables users to build robust, data-driven Internet Transaction Programs (ITP) for the intranet or internet
- Enables you to create Web Objects (application modules) that map data to and from static HTML documents using the WebSpeed Workshop and WebSpeed 4GL

DT2\_WC\_170 Web Components

## WebSpeed

### What Is WebSpeed



## What is WebSpeed?

- Enables you to deploy your HTML pages and Web Objects to a run-time environment using the WebSpeed Transaction Server

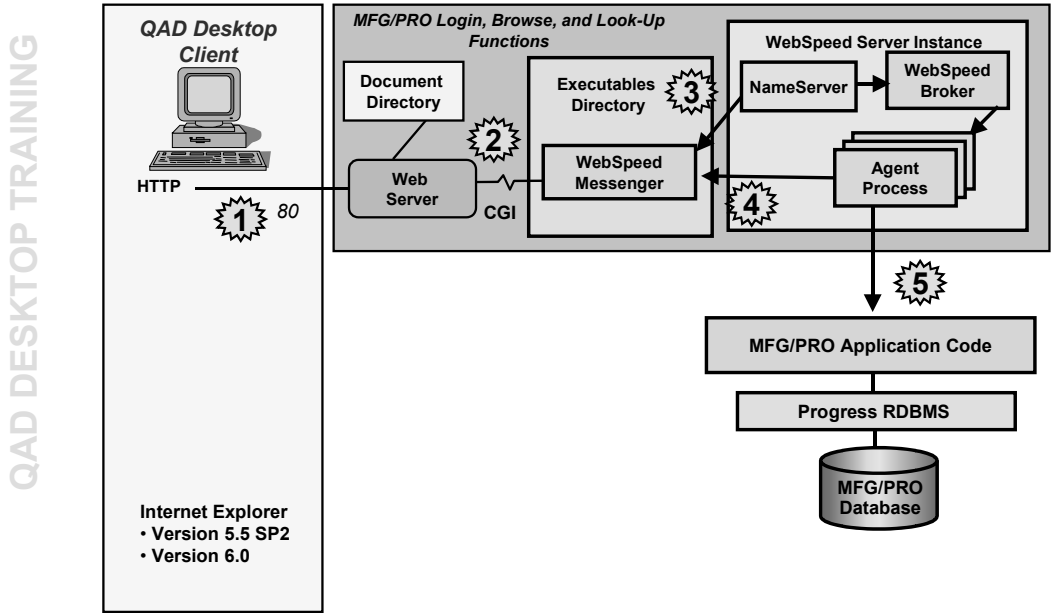
QAD DESKTOP TRAINING

DT2\_WC\_180 Web Components

**What Is WebSpeed?, cont.**



# WebSpeed



DT2\_WC\_190 Values indicate assigned port numbers

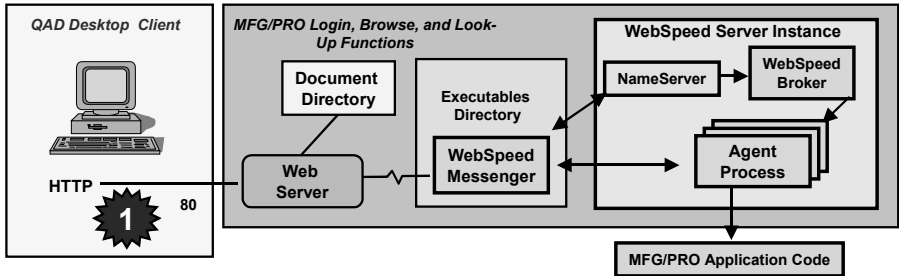
Web Components

WebSpeed, cont.



# WebSpeed Architecture

- Connection 1:
  - Network Connection between the browser and the web server. Default server port is 80
  - Web server and WebSpeed messenger must be on the same machine
  - Web server communicates with the WebSpeed messenger

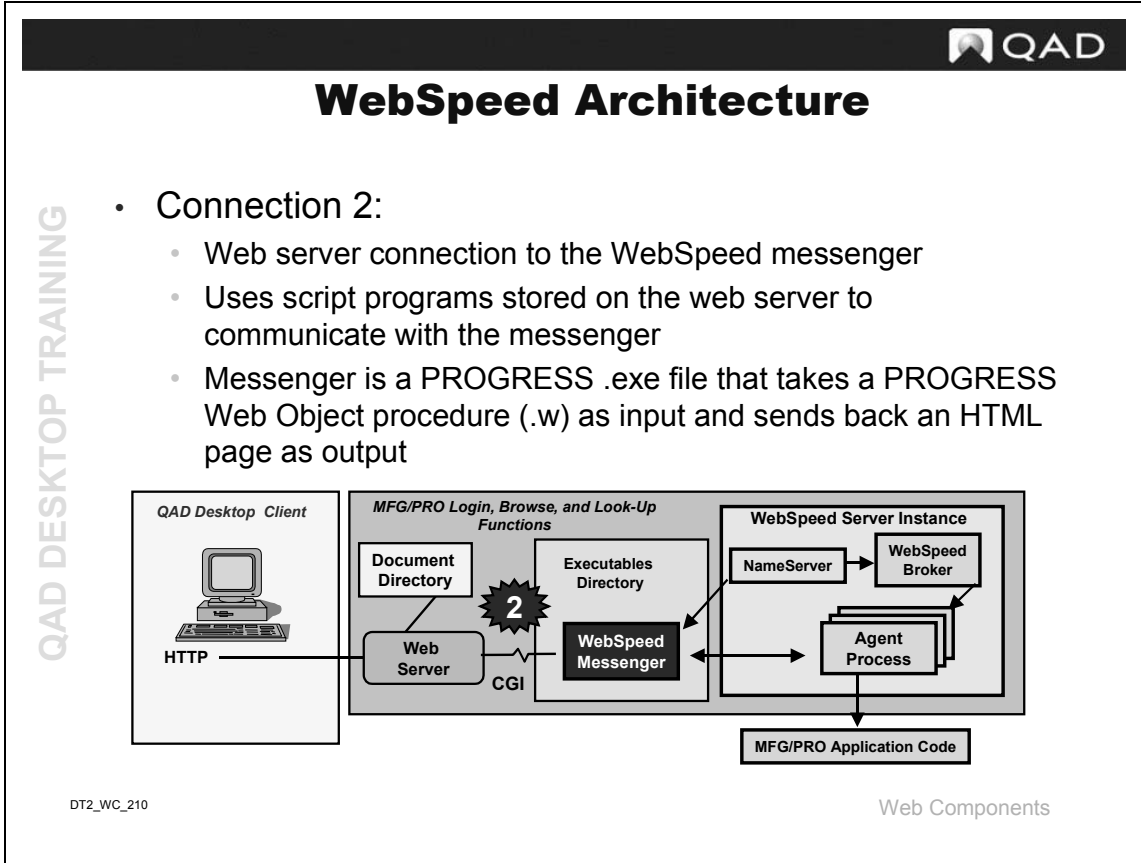


DT2\_WC\_200

Web Components

## WebSpeed Architecture



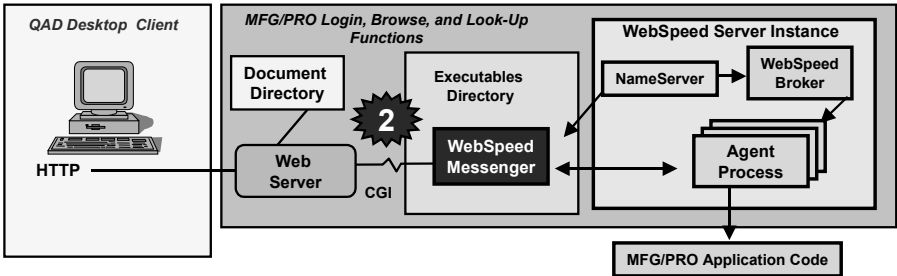


**WebSpeed Architecture, cont.**



# WebSpeed Architecture

- CGI Messenger executables are:
  - cgiip.exe (NT) cgiip (UNIX)
- The messenger asks the broker if there are agents available to run a web object, then passes the web object to the agent for processing

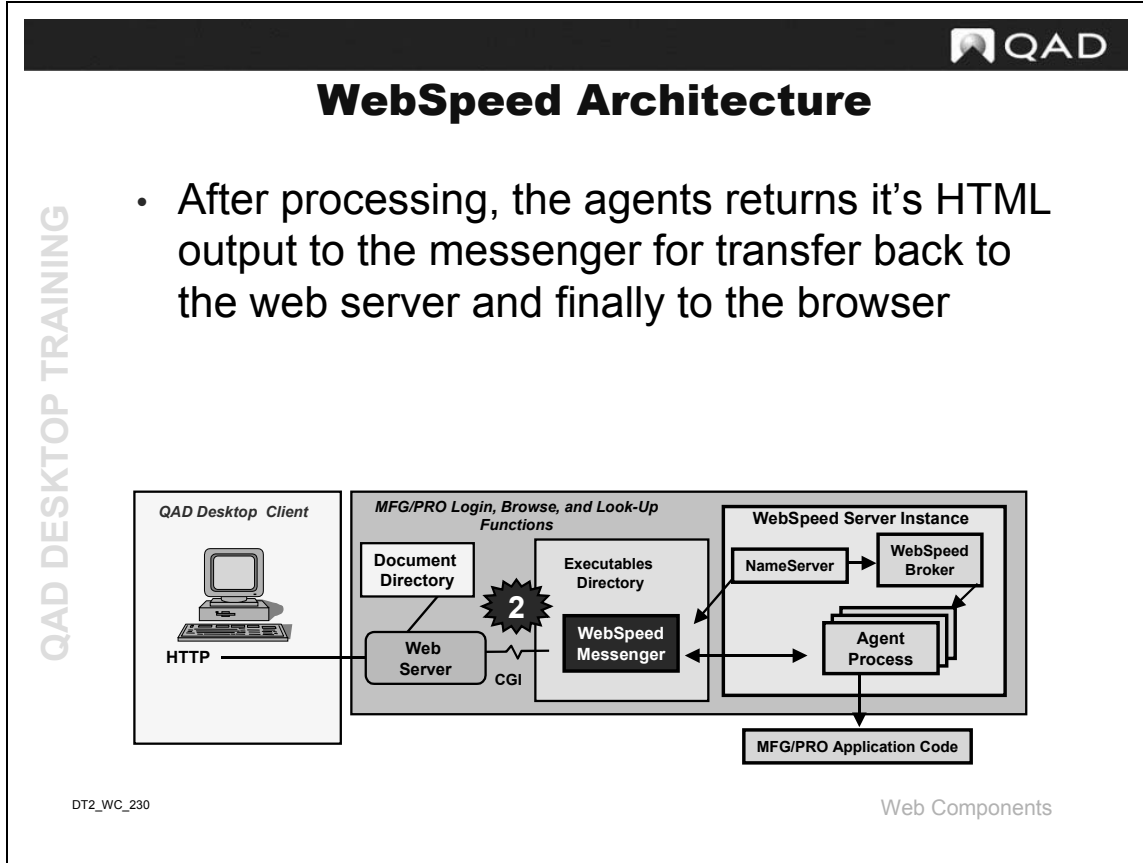


DT2\_WC\_220

Web Components

## WebSpeed Architecture, cont.



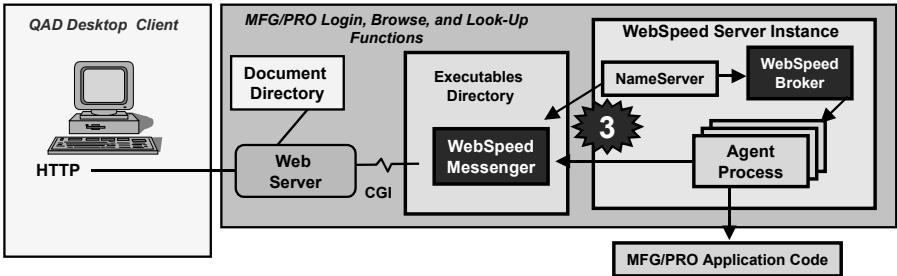


WebSpeed Architecture, cont.



# WebSpeed Architecture

- Connection 3:
  - Network connection between the messenger and the transaction broker
  - Defined by the hostname and port defined in the ubroker.properties file

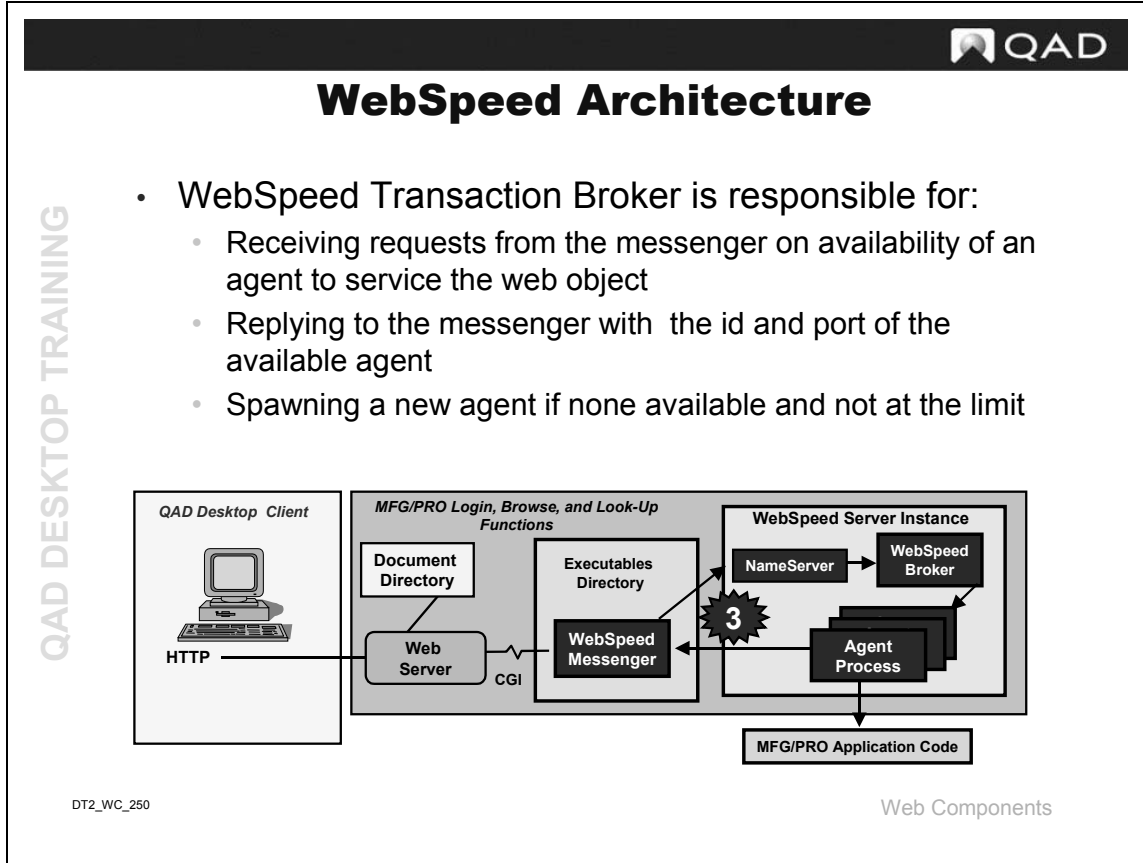


DT2\_WC\_240

Web Components

## WebSpeed Architecture, cont.





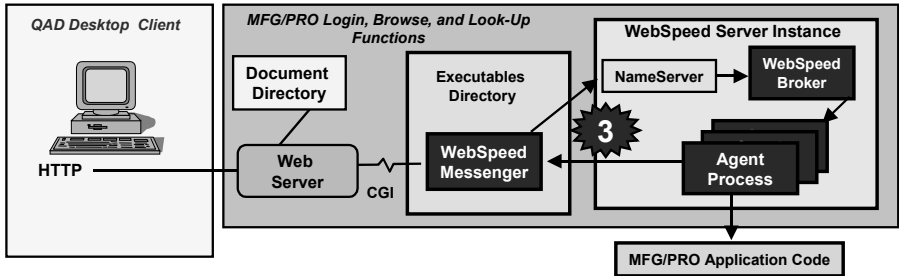
**WebSpeed Architecture, cont.**

QAD DESKTOP TRAINING



# WebSpeed Architecture

- The WebSpeed broker will assign an agent
  - If at the limit, sends msg to messenger that no agents are available
  - Provides the status and states of running agents
    - STARTING, AVAILABLE, LOCKED, BUSY

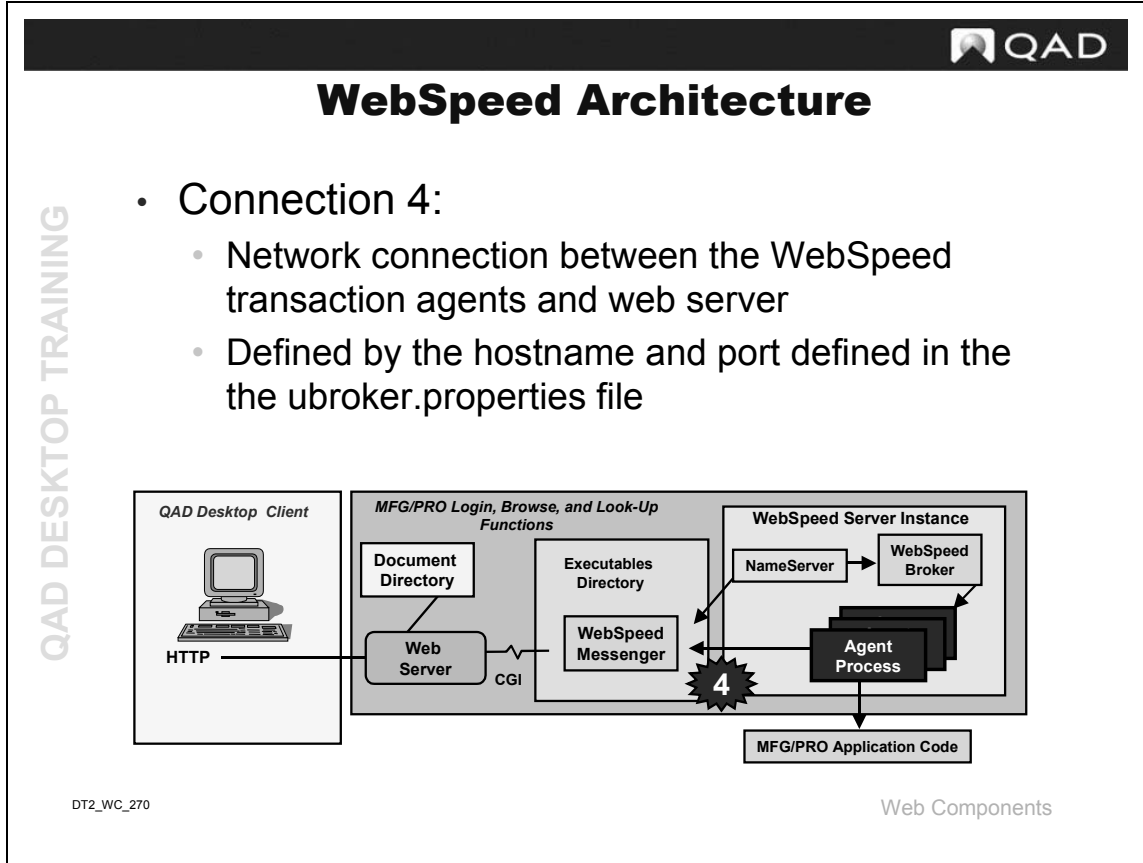


DT2\_WC\_260

Web Components

## WebSpeed Architecture, cont.



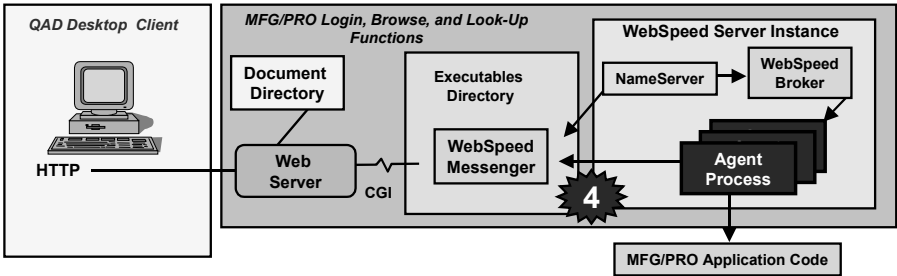


**WebSpeed Architecture, cont.**



# WebSpeed Architecture

- WebSpeed Transaction Agent:
  - A PROGRESS client (\_progres) with modifications to work with WebSpeed
  - Agents accept requests from the messenger in the form of a URL, parse the URL for the name of the web object to execute, and then run it
  - Passes output back to the messenger

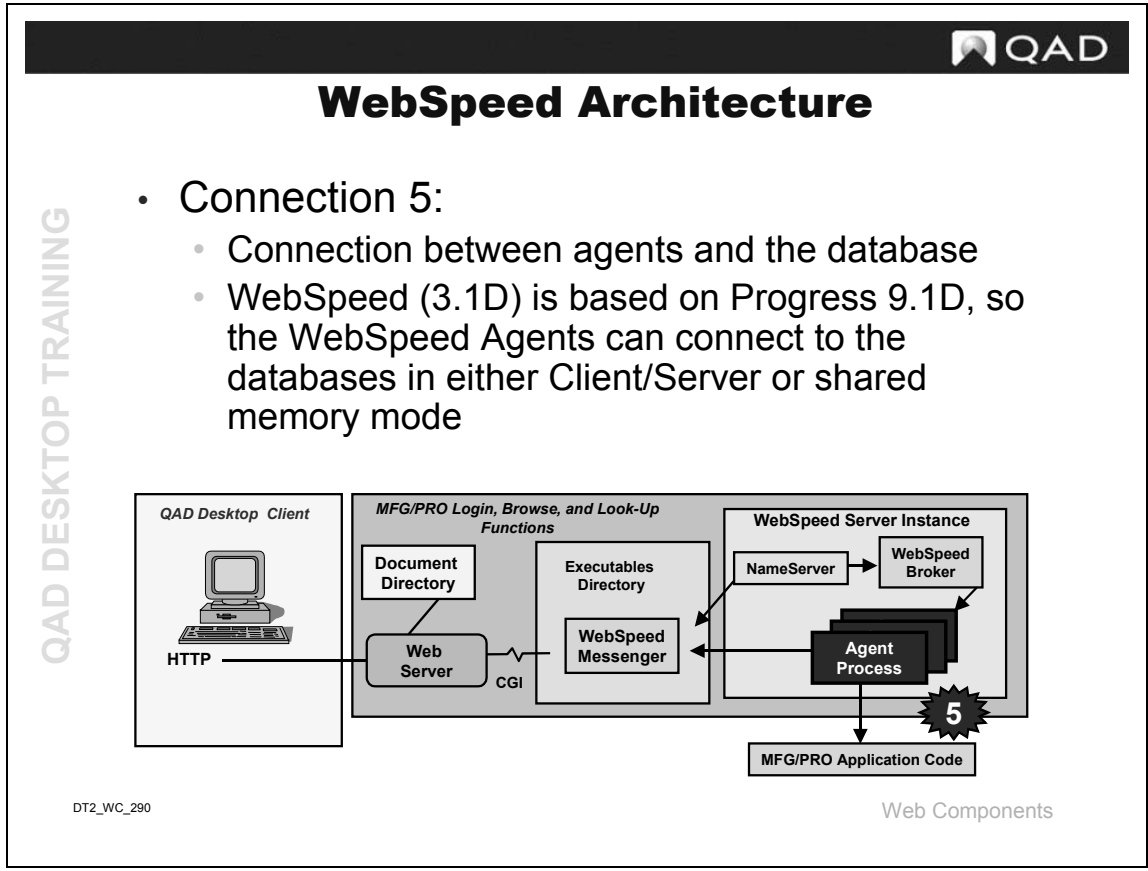


DT2\_WC\_280

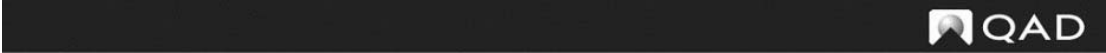
Web Components

## WebSpeed Architecture, cont.

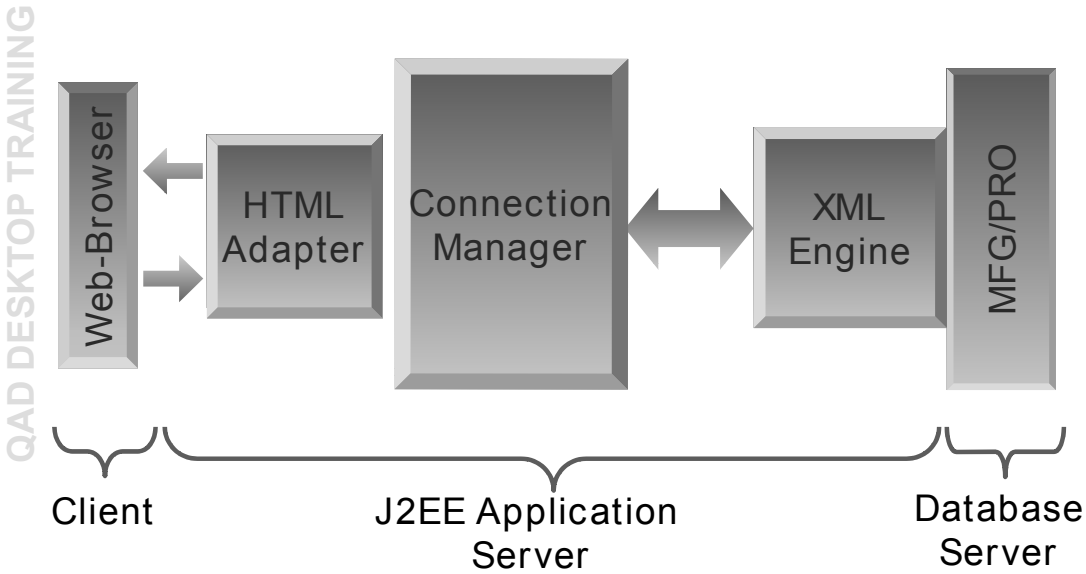




WebSpeed Architecture, cont.



# J2EE Application Server




QAD DESKTOP TRAINING

DT2\_WC\_300

Web Components

## J2EE Application Server





## Tomcat

QAD DESKTOP TRAINING

- Java based web application container
- Runs servlet and JavaServer Web applications

DT2\_WC\_310Web Components

## Tomcat



## Tomcat Terminology


QAD DESKTOP TRAINING

- **Servlet** – Simple, consistent mechanism for extending the functionality of a Web Server
- **JSP** – JavaServer Pages; technology to rapidly develop and easily maintain, information-rich, dynamic web pages
- **XSL** – e**X**tensible **M**arkup **L**anguage
- **XSLT** – Transforms XML to another format and allows manipulation of Elements, Attributes & Data

DT2\_WC\_320

Web Components

### Tomcat Terminology




## Tomcat Directories

QAD DESKTOP TRAINING

- Key Sub-directories
  - /bin – administration scripts
    - “startup.sh”
    - “shutdown.sh”
  - /logs – log files directory
    - “catalina.out”
  - /conf – configuration files directory
    - “server.xml”
  - /webapps – web applications directory
    - Location of Desktop directories and files

DT2\_WC\_330Web Components

## Tomcat Directories




## Tomcat Files

- Startup and shutdown scripts
  - For Tomcat Server
  - Set JAVA\_HOME Environment Variable
  - Uses Administration port (8005)
- Log files
  - “catalina.out”
  - Helpful for resolving Tomcat issues

DT2\_WC\_340 Web Components

## Tomcat Files




## Tomcat Server Configuration

QAD DESKTOP TRAINING

- Ports definitions for Tomcat
  - Defined in “/conf/server.xml” file
  - Admin port                    8005
  - Tomcat Server port   8080
- Admin User definitions
  - Defined in “/conf/tomcat-users.xml” file
  - User id and password with role

DT2\_WC\_350 Web Components

## Tomcat Server Configuration




## Tomcat Desktop Files

QAD DESKTOP TRAINING

- Desktop.war file
  - explodes to create Desktop directory structure and files
- Key Desktop directories and files
  - /WEB-INF
  - /WEB-INF/conf
    - “config.xml”
      - For configuration of connection manager
      - Edit via Connection Manager ...
    - “process-config.xml”
      - Created and configured during Desktop installation

DT2\_WC\_360Web Components

## Tomcat Desktop Files



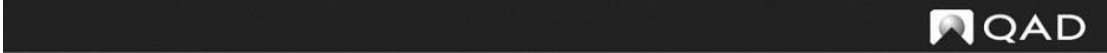
## Using Tomcat

QAD DESKTOP TRAINING

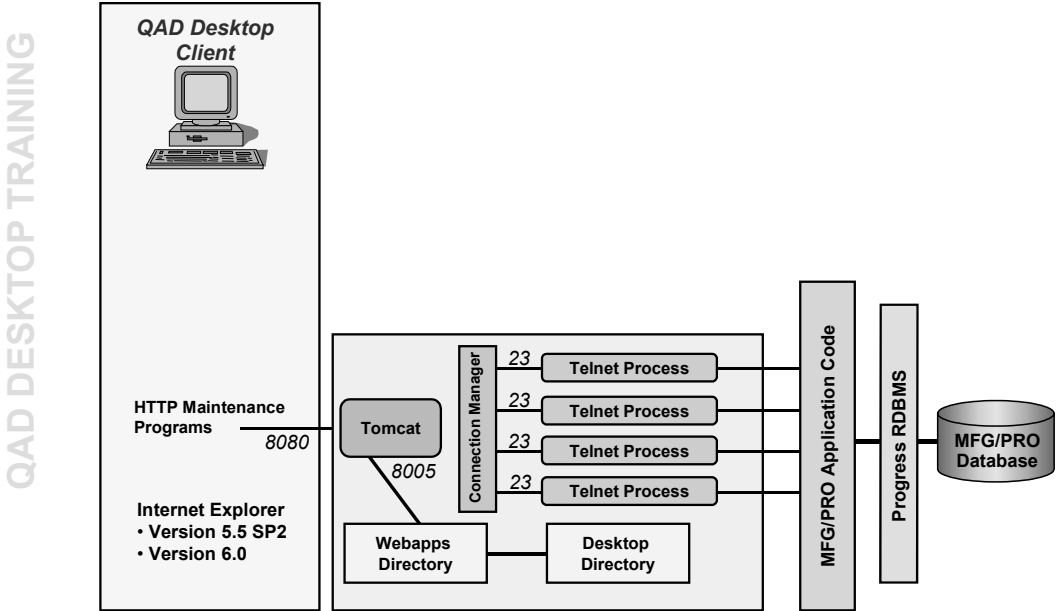
- Set JAVA\_HOME environment variable
- Startup Tomcat (startup.sh)
- Verify Tomcat Server is up  
(<http://server:8080>)
- Shutdown Tomcat (shutdown.sh) as needed
- See “catalina.out” for error messages

DT2\_WC\_370Web Components

## Using Tomcat




# Tomcat Engine Architecture



DT2\_WC\_380 Values indicate assigned port numbers

Web Components


## Tomcat Engine Architecture



## Course Overview


QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
  - ◆ Desktop Components
  - ◆ System Requirements
  - ◆ UNIX Considerations
  - ◆ NT Considerations
  - ◆ URL Links
  - ◆ Client Installation
  - ◆ Processor Editor
  - ◆ Multi-Systems
  - ◆ Deployment
  - ◆ Performance and Tuning
  - ◆ Oracle Considerations
  - ◆ Troubleshooting

DT2\_WC\_390Web Component 

CHAPTER 3

# **System Requirements**




## Overview

QAD DESKTOP TRAINING

- Introduction
- Prerequisites
- Web Server requirements
- WebSpeed Server requirements
- MFG/PRO Server requirements
- Tomcat requirements
- Disk space
- Client requirements

DT2\_SR\_010System Requirements

## System Requirements Overview



## Wide Variety of Skills Required

- MFG/PRO installation and administration
- Web Server installation and administration
- WebSpeed installation and administration
- Java installation
- Tomcat installation and administration
- Basic HTML experience
- Basic Telnet experience

QAD DESKTOP TRAINING

DT2\_SR\_020

System Requirements

**overview, cont.**

The following are references which may be helpful:


MFG/PRO System Administration Class

MFG/PRO eB or eB2 installation guides

[www.apache.org](http://www.apache.org)

[Java.sun.com](http://Java.sun.com)

[Jakarta.apache.org](http://Jakarta.apache.org)




## Prerequisites

QAD DESKTOP TRAINING

- MFG/PRO eB or eB 2 character client environment
- Ensure network addressability between each of the servers and clients in your Desktop configuration

DT2\_SR\_030 System Requirements

## Prerequisites




## Web Server Requirements

QAD DESKTOP TRAINING

- Web Server software requirements
  - Any Web Server that supports a common gateway interface (CGI)
  - Examples:
    - Apache HTTP Web Server
    - Netscape Web Servers – iPlanet (Sun ONE Web Server)
    - Microsoft Internet Information Server

DT2\_SR\_040System Requirements

## Web Server Requirements



## Web Server Requirements

QAD DESKTOP TRAINING

- Web Server hardware requirements
  - Http Apache Web Server:
    - 50 MB of RAM
  - Netscape Enterprise Web Server
    - 32 MB of RAM
    - 100 MB of disk space
  - Microsoft IIS:
    - 16 MB of RAM
    - 160 MB of disk space

DT2\_SR\_050 System Requirements


### Web Server Hardware Requirements

See:

Apache: [www.apache.org](http://www.apache.org) for more information

Netscape: [www.Netscape.com](http://www.Netscape.com) for information

For other systems [www.msn.com](http://www.msn.com)



## **WebSpeed Server Requirements**

QAD DESKTOP TRAINING

- WebSpeed Server software requirements
  - PROGRESS WebSpeed Transaction server Version 3.1C or 3.1D
  - Enough WebSpeed Agent licenses to support expected transaction volume
- Planning rule of thumb for WebSpeed Agents
  - One agent for every five Desktop users


DT2\_SR\_060 System Requirements

## **WebSpeed Server Requirements**

### **WebSpeed Server Software Requirements**

Refer to the WebSpeed Agent Sizing and Behavior section of the QAD Desktop Installation Guide.

Note: The WebSpeed licenses are sold in multiples of 5.



## WebSpeed Server Requirements


QAD DESKTOP TRAINING

- WebSpeed Server hardware requirements
  - 128 MB RAM
  - 226 MB disk space
- Supported WebSpeed platforms
  - Windows (Intel)
  - Sun Solaris (SPARC)
  - IBM AIX
  - Compaq Tru64
  - HP-UX
  - Linux

DT2\_SR\_070 System Requirements

### WebSpeed Server Hardware Requirements

These are Progress' minimum requirements for the WebSpeed Transaction Server. The requirements for the WebSpeed Development Server requires only 96 MB of RAM (126MB recommended) and 345 MB of disk space.




## MFG/PRO Server Requirements

QAD DESKTOP TRAINING

- MFG/PRO Server software requirements
  - MFG/PRO eB (+ current SP)
  - MFG/PRO eB2 (+ current SP)
  - PROGRESS 9.1D
  - Supports PROGRESS or ORACLE databases
- MFG/PRO Server hardware considerations
  - Possible increase of Telnet activity
  - What is the current utilization of the MFG/PRO database server?

DT2\_SR\_080 System Requirements

## MFG/PRO Server Requirements



## Client Requirements


QAD DESKTOP TRAINING

- **Operating Systems \***
  - Microsoft Windows 95 and Windows 98
  - Microsoft Windows NT 4.0
  - Microsoft Windows 2000 and Windows XP (eB2)
- **Web Browsers**
  - Microsoft Internet Explorer 5.5 sp 2
  - Microsoft Internet Explorer 6
- **Client Software**
  - Java Runtime environment (JRE1.3.1\_03+)
  - True Type Courier Fonts for Windows 95 if necessary

DT2\_SR\_090System Requirements

## Client Requirements

Note: Microsoft Internet Explorer: 6.0 highly recommended.



## Client Requirements

QAD DESKTOP TRAINING


- **Minimum client hardware**
  - P400 or faster processor – P600 is ideal
  - Memory (the more the better):
    - Win 95, 98, or ME: 128MB
    - Win NT, 2000 or XP: 256MB
  - 15-25 MB of disk space
  - 1024 x 768 resolution
  - Display 65,536 colors

DT2\_SR\_100 System Requirements

### Client Requirements, cont.

The recommended requirements are:


- P800 processor
- Memory:
  - Win 95, 98, or Me:128MB
  - Win NT, 2000 or XP:256MB
- Disk space requirements can vary depending on the version of Java



## Course Overview


QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
  - ◆ UNIX Considerations
  - ◆ NT Considerations
  - ◆ URL Links
  - ◆ Client Installation
  - ◆ Processor Editor
  - ◆ Multi-Systems
  - ◆ Deployment
  - ◆ Performance and Tuning
  - ◆ Oracle Considerations
  - ◆ Troubleshooting

DT2\_SR\_110System Requirements 

CHAPTER 4

# **UNIX Considerations**




## UNIX Considerations Topics

QAD DESKTOP TRAINING

- Installation Overview
- WebSpeed Installation
- Desktop Installation
- Tomcat Configuration

DT2\_UL\_010Installation on UNIX

## UNIX Considerations Topics




## UNIX Considerations Overview

QAD DESKTOP TRAINING

- Installation pre-requisites
- Install WebSpeed
- Install JAVA
- Preparation for Desktop Install
- Install the QAD Desktop media
- Install the client files from the Web browser
- Configure Webapp
- Up and running!

DT2\_UI\_020Installation on UNIX

## UNIX Considerations Overview




## Install Pre-Requisites

QAD DESKTOP TRAINING

- Web Server
  - Scripts Directory
  - Docs Directory
- Character client
  - eB (+ current SP) or
  - eB2 (+ current SP)
- Java
  - J2SDK 1.4 or J2SEE (server)
  - JRE 1.3.1\_03+ (client)

DT2\_UI\_030 Installation on UNIX

### Install Pre-Requisites



## WebSpeed Installation

QAD DESKTOP TRAINING

- Version 9.1C
- Web server docs directory
- Web server scripts directory
- Installation

DT2\_UI\_040Installation on UNIX

## WebSpeed Installation

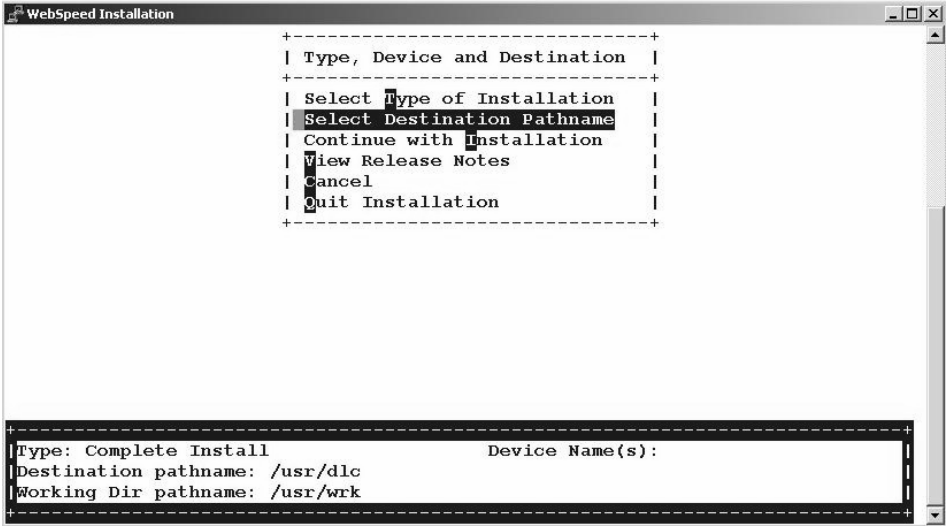
The screenshot shows a window titled "WebSpeed Installation" with the QAD logo in the top right corner. The main heading is "WebSpeed Installation". On the left side, there is a vertical label "QAD DESKTOP TRAINING". The central content is a dialog box with a dashed border titled "Before You Start". The text inside the dialog box reads: "Before you start you will need to know the following:" followed by a list of requirements: "-Web Server type API (NSAPI, CGI)", "-Web Server script and Document Root directories", "-Language for messages and data (English, French, etc...)", and "-Deployment architecture (Local or Distributed)". Below the list, it says: "Please consult your System Administrator or Webmaster for Web Server information. For deployment information, see the 'WebSpeed Installation and Configuration Guide'." and "[Enter=OK]". At the bottom left of the window, the text "DT2\_UI\_050" is visible, and at the bottom right, "Installation on UNIX" is displayed.

**WebSpeed Installation, cont.**

QAD

## WebSpeed Installation

QAD DESKTOP TRAINING



The screenshot shows a window titled "WebSpeed Installation" with a menu of options:

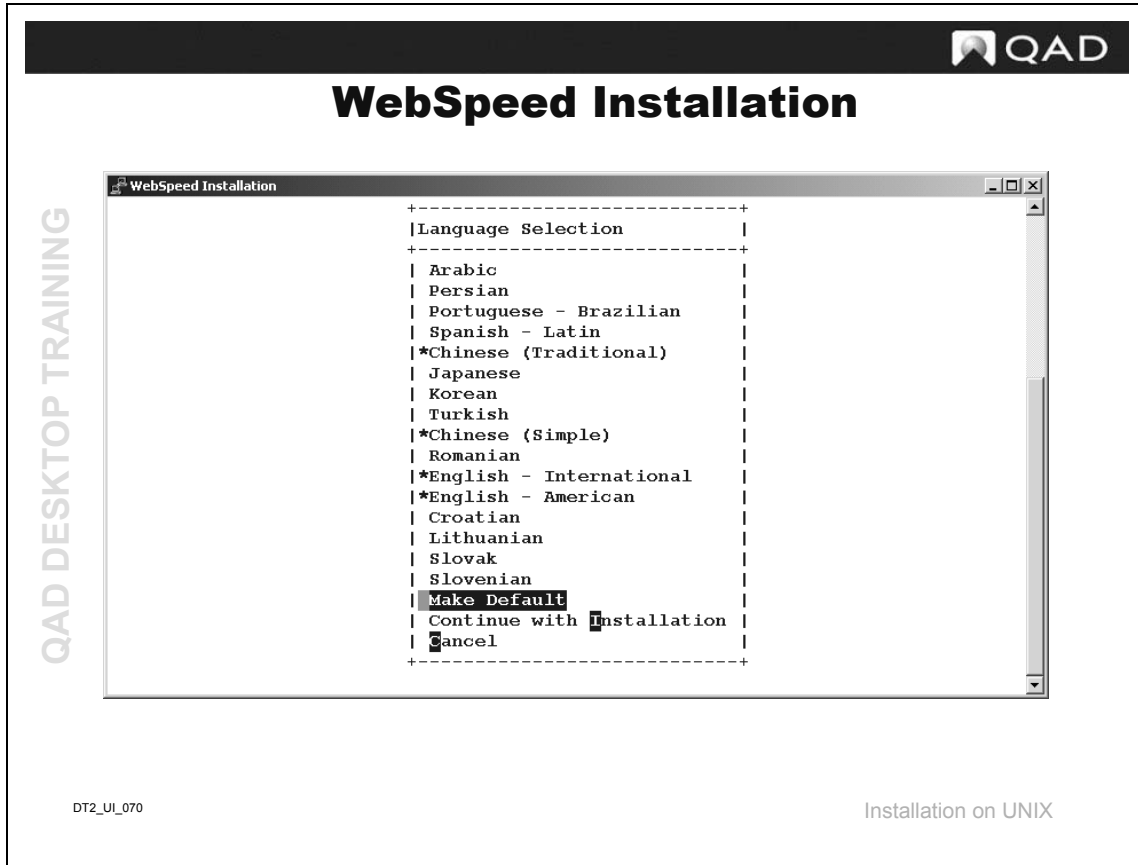
- Type, Device and Destination
- Select Type of Installation
- Select Destination Pathname
- Continue with Installation
- View Release Notes
- Cancel
- Quit Installation

Below the menu is a summary box with the following text:


```
Type: Complete Install           Device Name(s):  
Destination pathname: /usr/dlc  
Working Dir pathname: /usr/wrk
```

DT2\_UI\_060 Installation on UNIX

### WebSpeed Installation, cont.



**WebSpeed Installation, cont.**



## WebSpeed Installation

QAD DESKTOP TRAINING

Complete Installation

|The following products will be installed:  
|'WS Ent Trans Svr (250 USERS)'

|Disk Space Required for Products: 331,049,984 bytes  
|Disk Space Required for Installation: 332,121,088 bytes  
|Disk Space Remaining After Installation: 8,787,449,856 bytes


|Selected Destination Path: /dr01/dlc

|Do you want to install the above listed product(s)?

[Y=YES] [N=NO]

DT2\_UI\_080Installation on UNIX

**WebSpeed Installation, cont.**



## Verification

QAD DESKTOP TRAINING


- Admin Server
- Name Server
- WebSpeed Broker

DT2\_UI\_090Installation on UNIX

**WebSpeed Installation, cont.**

CHAPTER 5

# **NT Considerations**




## Overview

QAD DESKTOP TRAINING

- MIIS Configuration
- Installation of Apache on NT
- Java Considerations
- Installation and Administration of Georgia SoftWorks (GSW) NT Telnet Server
- Configuration Telnet on NT
- NT Processes

DT2\_NT\_010NT Considerations

## NT Considerations Overview




## MIIS Considerations

QAD DESKTOP TRAINING

- Microsoft Internet Information Server configuration:
  - Creation of new web server instances
  - Creating virtual directories
  - Setting Directory Permissions and Access Characteristics
  - Anonymous Logins
  - Dealing with those dreaded MIME Types
  - Disabling the IIS Administration Service

DT2\_NT\_020NT Considerations

## MIIS Considerations



## New Web Server Instance

QAD DESKTOP TRAINING

- Typically the Inetpub directory is on the C: Drive
- Create a new server directory on some other drive
- To create the new web server
  - Specify the web server name
  - Define a port number
  - Create the docs and cgi-bin subdirectories
  - Configure virtual directories
  - Set directory permissions
  - Enable anonymous login
  - Set any required Default Applications
- Then you are ready to install QAD Desktop on this Web Server

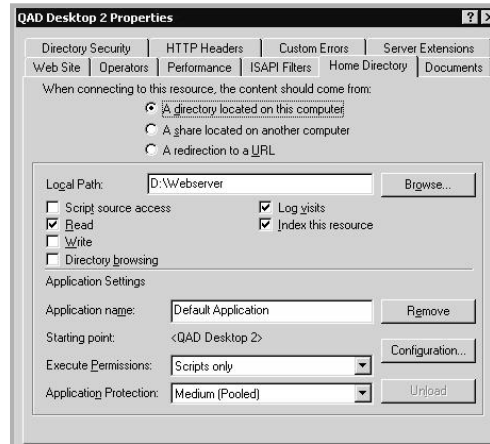
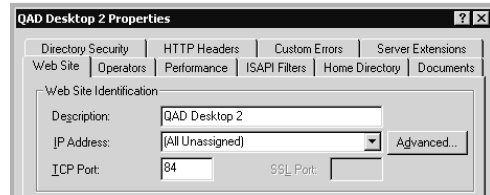
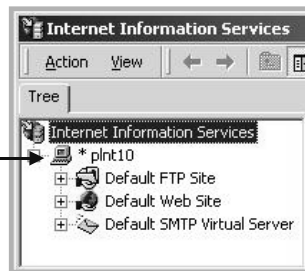
DT2\_NT\_030 NT Considerations

## New Web Server Instance

## Create a New Web Server

- Use the Web Site Creation Wizard
  - Specify the server name
  - Specify the server port number
  - Specify the server home directory


- Right Click
- Select New
- then Web Site



DT2\_NT\_040

NT Considerations


## Create a New Web Server



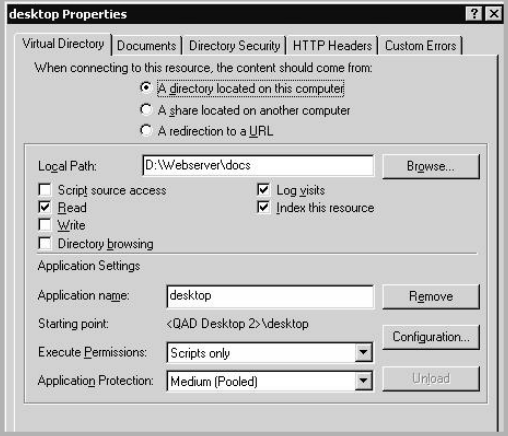
## Create a New Web Server (cont'd)

QAD DESKTOP TRAINING

- Under the new web server home directory create:
  - docs directory - d:\webserver\docs
  - cgi-bin directory - d:\webserver\cgi-bin
- Use the Virtual Directory Creation Wizard to:
  - Create the virtual directory for docs
  - Set the Application name
  - Set Execute Permissions to Scripts only



- Right Click
- Select **N**ew
- then Virtual Directory



DT2\_NT\_050

NT Considerations

**Create a New Web Server, cont.**

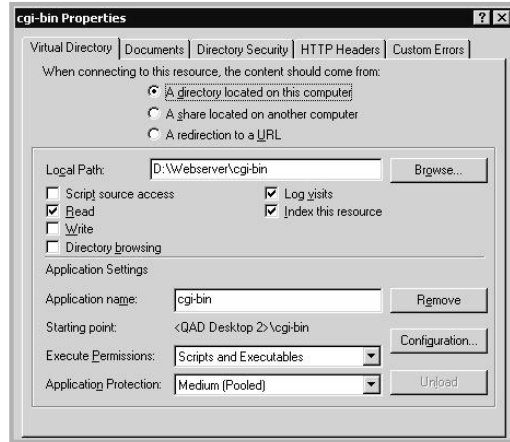


## Create a New Web Server (cont'd)

Use the Virtual Directory Creation Wizard to:

- Create the virtual directory for cgi-bin
- Set the Application name
- Set Execute Permissions to Scripts and Executables


- Right Click
- Select **N**ew
- then Virtual Directory



DT2\_NT\_060

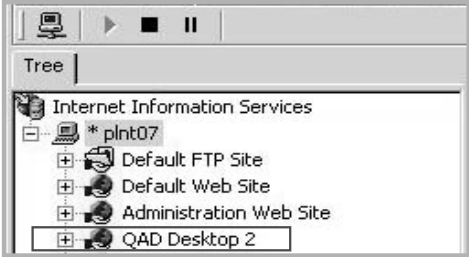
NT Considerations

Create a New Web Server, cont.




## Enable Anonymous Access

- Right Click web server instance Icon and select Properties




- Select Directory Security and click Edit



DT2\_NT\_070 NT Considerations

### Enable Anonymous Access



## Enable Anonymous Access (cont'd)

- Check Anonymous access and click Edit

Authentication Methods

**Anonymous access**  
 No user name/password required to access this resource.  
  
 Account used for anonymous access: Edit...

- Ensure Anonymous user password is correct

Anonymous User Account

Anonymous User  
Select the Windows User Account used to access this computer when an anonymous user connects to this site.


Username:  Browse...

Password:

Allow IIS to control password

DT2\_NT\_080
NT Considerations

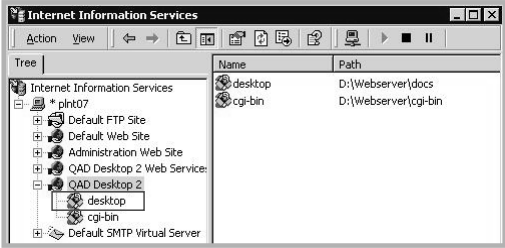
### Enable Anonymous Access, cont.

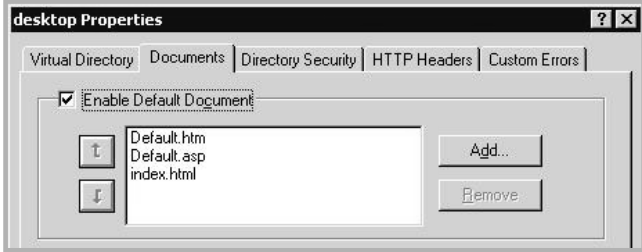


## Enable Default Applications

QAD DESKTOP TRAINING


- Enable Default Documents
  - Right Click the desktop virtual directory and select Properties
  - Under the Documents tab add any default document names necessary





DT2\_NT\_090
NT Considerations

## Enable Default Applications




## Configuring Mime Types

QAD DESKTOP TRAINING

- MIIS 4.0 and 5.0 come with the appropriate Multipurpose Internet Mail Extensions (Mime) types already registered
  - Including application/octet-stream .exe
- For proper Mime behavior to occur the virtual directory Execute Permissions must be set correctly:
  - Set docs or desktop to Scripts Only
  - Set cgi-bin to Scripts and Executables

DT2\_NT\_100NT Considerations

## Configuring Mime Types



## Disabling the IIS Admin Service

- The IIS Administration Service can be disabled through the Services Icon in the Administrative Tools Folder

QAD DESKTOP TRAINING

Name	Description	Status	Startup Type
Hummingbird Inetd		Started	Automatic
IIS Admin Service	Allows ad...	Started	Automatic

**Entire IIS Admin Service**

Name	Description	Status	Startup Type
Workstation	Provides n...	Started	Automatic
World Wide Web Publishing Service	Provides ...	Started	Automatic

**WWW Publishing Service only**

**World Wide Web Publishing Service Properties (Local Computer)**

General | Log On | Recovery | Dependencies

Service name: W3SVC

Display name: World Wide Web Publishing Service

Description: Provides Web connectivity and administration through t


Path to executable: C:\WINNT\System32\inet\_srv\inetinfo.exe

Startup type: Disabled

NT Considerations

DT2\_NT\_110

## Disabling the IIS Administration Service




## Installation of Apache on NT

QAD DESKTOP TRAINING

- Apache on NT can be installed and administered much like it is on Unix
- It can run as an registered NT service
- The NT version can be downloaded from the Apache website:
  - <http://httpd.apache.org>
- Has a Wizard to guide you through the installation
- Download to a directory on the NT server and run the setup file
  - *Examples:* `apache_1.3.26-win32-x86-no_src.exe` **or** `apache_2.0.40-win32-x86_no_ssl.exe`

DT2\_NT\_120NT Considerations

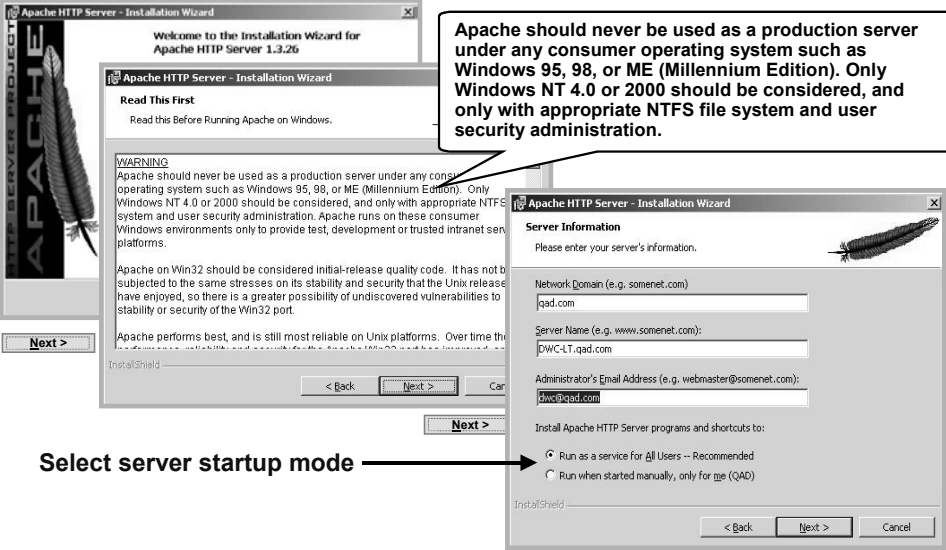
## Installation of Apache on NT



## Installation of Apache on NT (cont'd)

- The Installation Wizard guides you through installation

QAD DESKTOP TRAINING




**Apache should never be used as a production server under any consumer operating system such as Windows 95, 98, or ME (Millennium Edition). Only Windows NT 4.0 or 2000 should be considered, and only with appropriate NTFS file system and user security administration.**

**Select server startup mode** →

DT2\_NT\_130

NT Considerations

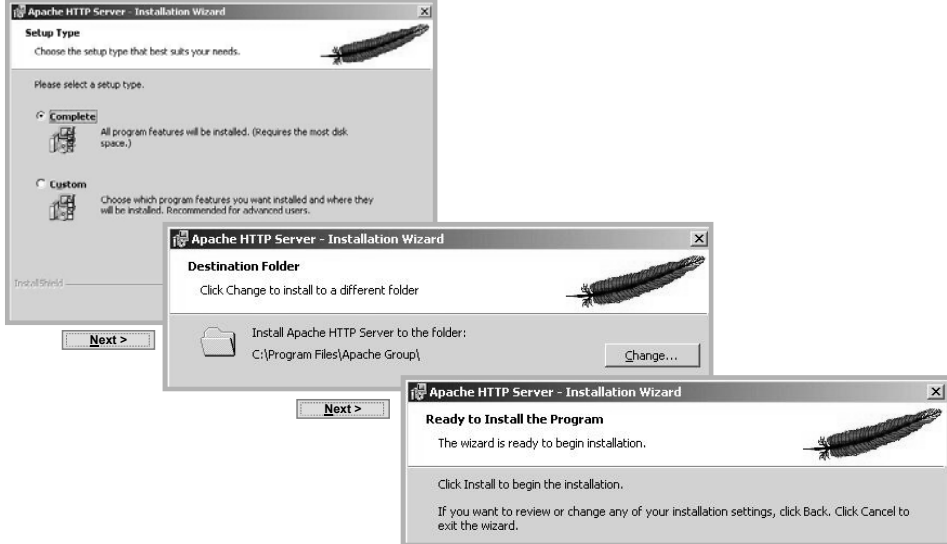
### Installation of Apache on NT, cont.



## Installation of Apache on NT (cont'd)


- The Installation Wizard continues through installation

QAD DESKTOP TRAINING




DT2\_NT\_140
NT Considerations

**Installation of Apache on NT, cont.**

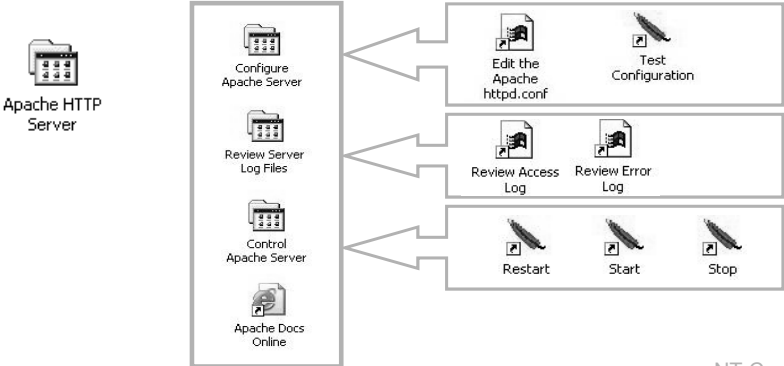


## Installation of Apache on NT (cont'd)

- The Installation Wizard indicates completion



- The Windows Desktop will now contain an Apache Folder



DT2\_NT\_150 NT Considerations

### Installation of Apache on NT, cont.



## Java Considerations


QAD DESKTOP TRAINING

- When Java is installed on NT it creates a registry entry for each version.
- If you plan to run a QAD Desktop 2 client on an NT server where Tomcat is running you will have 2 Java versions installed
  - JRE 1.3.1\_03 for the client
  - J2SDK 1.4.0\_01 for Tomcat
- Tomcat only needs to have a JAVA\_HOME variable set and doesn't rely on the NT registry
- To avoid potential Java environment conflicts use a modified installation technique

DT2\_NT\_160

NT Considerations

## Java Considerations



## Java Considerations (cont'd)

QAD DESKTOP TRAINING

- Modified installation technique:
  - Install the J2SDK1.4.0\_01 first
  - A sample installation path could be:  
**D:\j2sdk1.4.0\_01**
  - Next **copy** the entire Java directory to another location such as:  
**D:\java\j2sdk1.4.0\_01**
  - Then uninstall the J2SDK1.4.0\_01 using the Control Panel – Add/Remove Programs function
  - Set the JAVA\_HOME variable for Tomcat

DT2\_NT\_170 NT Considerations

### Java Considerations, cont.

## Java Considerations (cont'd)

- Set the JAVA\_HOME variable for Tomcat by:
  - Inserting a set command in the Tomcat startup.bat file


```
rem Start script for the CATALINA Server
rem $Id: startup.bat,v 1.3.4.2 2002/01/30 18:10:40 patrickl Exp
rem set Java Home
set JAVA_HOME=c:\java\j2sdk1.4.0_01
```

```
Tomcat control
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.
d:\dt2web\tomcat\bin>startup
Using CATALINA_BASE: ..
Using CATALINA_HOME: ..
Using CATALINA_TMPDIR: ..\temp
Using JAVA_HOME: c:\java\j2sdk1.4.0_01
d:\dt2web\tomcat\bin>
```

- Setting JAVA\_HOME as a variable in NT

DT2\_NT\_180
NT Considerations

**Java Considerations, cont.**




## Installing Georgia SoftWorks

QAD DESKTOP TRAINING

- Georgia SoftWorks (GSW) Telnet Server is the QAD supported Telnet product for NT and Windows 2000 Server
- Georgia SoftWorks is included on the Desktop 2 installation media
- Customer must register Georgia SoftWorks prior to expiration of evaluation period
- Once registered, customer receives 60 days of free support through Georgia SoftWorks

DT2\_NT\_190NT Considerations

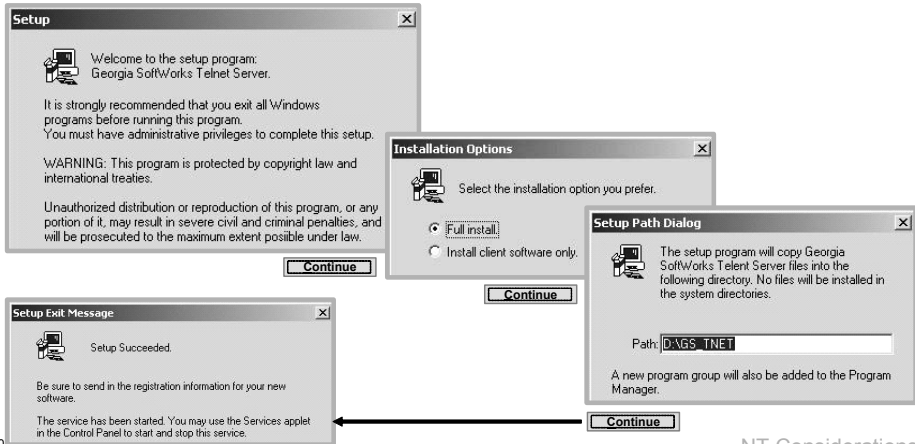
## Installing Georgia SoftWorks



## Installing Georgia SoftWorks (cont'd)

- Download the latest version of Georgia SoftWorks Telnet Server from:  
<http://www.georgiasoftworks.com>
- Unzip the .zip file and run setup.exe


QAD DESKTOP TRAINING



NT Considerations

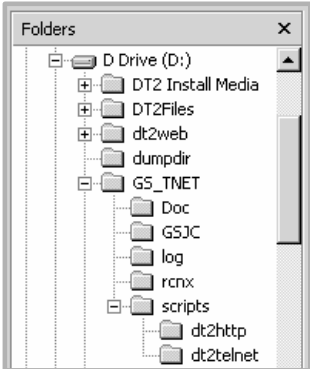
DT2\_NT\_20

### Installing Georgia SoftWorks, cont.



## Georgia SoftWorks Directory Structure

QAD DESKTOP TRAINING



- Once installed, the Georgia SoftWorks directory structure contains several key files and directories:
  - The \GS\_TNET or install directory contains the executables
  - The \Doc contains the Users Guide in Microsoft Word format
  - The \log directory contains the access and errors logs
  - The \scripts directory can contain a subdirectory for each user

This subdirectory provides the key to ease of user management by allowing Logon Scripting →

DT2\_NT\_210 NT Considerations

### Georgia SoftWorks Directory Structure



## Georgia SoftWorks Logon Scripting


QAD DESKTOP TRAINING

- Georgia SoftWorks (GSW) Telnet Server has a Logon Scripting feature
- During logon the following occurs:
  - GSW checks for the existence of a subdirectory, under \scripts, that matches the user name  
**InstallationPath\scripts\UserLogonID**
  - If that directory exists GSW checks for the existence of a k\_start.bat or c\_start.bat file  
**InstallationPath\scripts\UserLogonID\k\_start.bat or  
InstallationPath\scripts\UserLogonID\c\_start.bat**
  - If one of these files exists it will be executed. If both exist, only the c\_start.bat file is executed, but it can call the k\_start.bat file
  - If neither exists GSW will check for one of these files under the \scripts directory and use it as a global logon script
  - If neither exists the user will be left at a command prompt

DT2\_NT\_220

NT Considerations

## Georgia SoftWorks Logon Scripting



## GSW Logon Scripting with Desktop 2

QAD DESKTOP TRAINING


- To use the GSW logon scripting feature with QAD Desktop 2 you should define 2 users to NT – either local or domain
  - The first user is for HTTP Maintenance logon. An example is dt2http
  - The second user is for Telnet Maintenance logon. An example is dt2telnet
  - With Desktop 2 we use the k\_start.bat script
  - Each of these users will have a Home directory and an individual k\_start.bat file

D:\GS\_TNET \scripts\dt2http\k\_start.bat

D:\GS\_TNET\scripts\dt2telnet\k\_start.bat

DT2\_NT\_230 NT Considerations

## GSW Logon Scripting with Desktop 2




## GSW Logon Scripting with Desktop 2

QAD DESKTOP TRAINING

- In addition to the GSW directories each user should have a DT2 home directory
- These directories will contain MFG/PRO specific files used to start the MFG/PRO sessions
- Consider placing these home directories on a separate disk drive. Example:  
D:\DT2Files\dt2http  
D:\DT2Files\dt2telet
- Each directory will contain the following:
  - A Batch file - dt2\_start.bat - to set the environment variables
  - A Progress parameter file (.pf) to connect to the databases
  - A progress.chr file (ini) to set the MFG/PRO required variables such a DLC and PROPATH
  - The Batch file will be slightly different for each of the two users

DT2\_NT\_240 NT Considerations

### GSW Logon Scripting with Desktop 2, cont.




## GSW Logon Scripting with Desktop 2

QAD DESKTOP TRAINING


- The first user - ***dt2http*** - is used to run the HTTP Maintenance programs
- The k\_start.bat file for this user contains:
 

```
@echo off
set gwn_term=1
set gwn_graphics=3
set gwn_color=0
set
LRA_TERMINATION=SIG-CTRL-C,SLEEP5,SIG-CTRL-C,SLEEP5,F4,SLEEP5,e,x,i,t,
ENTER,SLEEP5,e,x,i,t,ENTER,SLEEP5,e,x,i,t,ENTER
d:
cd d:\DT2Files\dt2http
dt2_start
```
- When logon is complete the following command prompt appears:
 



DT2\_NT\_250
NT Considerations

### GSW Logon Scripting with Desktop 2, cont.




## GSW Logon Scripting with Desktop 2

QAD DESKTOP TRAINING


- The second user - ***dt2telnet*** - is used to run the Telnet Maintenance programs
- The k\_start.bat file for this user contains:
 

```
@echo off
set gwtn_term=0|
set gwtn_graphics=3
set gwtn_color=0
set
LRA_TERMINATION=SIG-CTRL-C,SLEEP5,SIG-CTRL-C,SLEEP5,F4,SLEEP5,e,x,i,t,
ENTER,SLEEP5,e,x,i,t,ENTER,SLEEP5,e,x,i,t,ENTER
d:
cd d:\DT2Files\dt2telnet
dt2_start
```
- When logon is complete the following command prompt appears
 



DT2\_NT\_260
NT Considerations

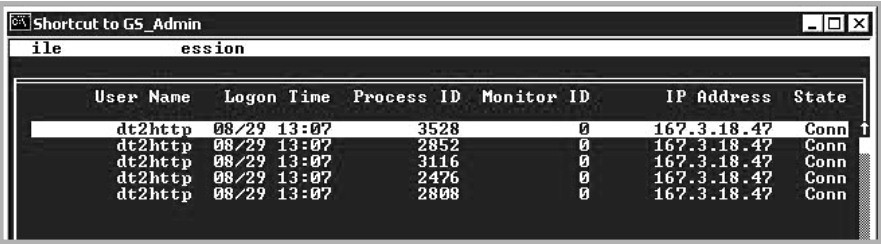
### GSW Logon Scripting with Desktop 2, cont.



## GSW Session Monitor

QAD DESKTOP TRAINING

- A very handy tool is the GSW Session Monitor
  - It allows monitoring of telnet sessions
  - It also allows shadowing and termination of telnet sessions
- To enable the GSW Session Monitor:
  - Add a Local Group called Gwtn Monitors
  - Restart the server
  - Create a Shortcut for GS\_Admin.exe



User Name	Logon Time	Process ID	Monitor ID	IP Address	State
dt2http	08/29 13:07	3528	0	167.3.18.47	Conn
dt2http	08/29 13:07	2852	0	167.3.18.47	Conn
dt2http	08/29 13:07	3116	0	167.3.18.47	Conn
dt2http	08/29 13:07	2476	0	167.3.18.47	Conn
dt2http	08/29 13:07	2808	0	167.3.18.47	Conn

DT2\_NT\_270
NT Considerations

## GSW Session Monitor



## Configuring Telnet on NT

QAD DESKTOP TRAINING


- Each k\_start.bat files contains a line that runs a dt2\_start command
- There is a unique dt2\_start.bat file in each telnet user's home directory
- The dt2\_start command sets environment variables for the telnet session:
  - DLC – the location of Progress
  - MFGPRO – the location of the MFG/PRO installation
  - INI – the name of the MFG/PRO ini file
  - PF – the name of the Progress parameter file used to connect to the databases
  - START\_MFG – an environment variable used to start the MFG/PRO session under Telnet

DT2\_NT\_280

NT Considerations

## Configuring Telnet on NT





## Configuring Telnet on NT (cont'd)

QAD DESKTOP TRAINING


- Each telnet user's home directory contains a unique dt2\_start.bat file:
  - The dt2\_start.bat file for HTTP Maintenance
 

```
set DLC=d:\progress\dlc91d
set MFGPRO=d:\mfgnteb2
set INI=Demonstration.chr
set pf=Demonstration.pf
set START_MFG=%DLC%\bin\progres -pf %PF% -ini %INI%
-param mfgwrapper=true -p %MFGPRO%\mfwb01a.p
```
  - The dt2\_start.bat for Telnet Maintenance
 

```
set DLC=d:\progress\dlc91d
set MFGPRO=d:\mfgnteb2
set INI=Demonstration.chr
set pf=Demonstration.pf
set START_MFG=%DLC%\bin\progres -pf %PF% -ini %INI%
-p %MFGPRO%\mfwb01a.p
```

DT2\_NT\_290
NT Considerations

### Configuring Telnet on NT, cont.



## Configuring Telnet on NT (cont'd)

QAD DESKTOP TRAINING

- Each of the Telnet user's home directory contains:
  - An INI file to set the Propath and DLC for the MFG/PRO session – example: Demonstration.chr


```
[WinChar Startup]
DLC=d:\progress\dlc91d
PROBUILD=d:\progress\dlc91d\probuild
PROPATH=d:\mfgnteb2,d:\mfgnteb2\lbbi
PROMSGS=d:\progress\dlc91d\promsgs
```

- A Progress parameter file (.pf) to connect to the databases – example: Demonstration.pf

```
-db d:\mfgnteb2\db\mfgdemo -ld qaddb -znotrim -trig triggers
-db d:\mfgnteb2\db\hlpprod -ld qadhelp
-db d:\mfgnteb2\db\admprod -ld qadadm
-d mdy -yy 1920 -Bt 350 -c 30 -D 100 -mmax 3000 -nb 200 -s 63
-noshvarfix
```

DT2\_NT\_300
NT Considerations

### Configuring Telnet on NT, cont.




## Configuring Telnet on NT (cont'd)

QAD DESKTOP TRAINING

- Once the dt2\_start.bat file is executed the MFG\_START environment variable is used to start the MFG/PRO session
- Each of the two dt2\_start.bat files will cause different behavior of the “Telnet listener”
  - The dt2\_start.bat file for the HTTP Maintenance session has the mfgwrapper parameter set to true
- Prior to trying to run a Desktop 2 client it is necessary to test each of the two Telnet types and carefully record the details of each prompt
- Use any Telnet client to do this test

DT2\_NT\_310NT Considerations

### Configuring Telnet on NT, cont.

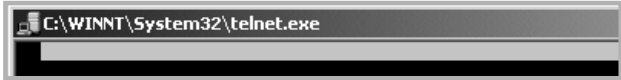


## Configuring Telnet on NT (cont'd)

QAD DESKTOP TRAINING

- Test Telnet login for HTTP Maintenance Userid and record the prompt and response format and case
- Telnet to the Desktop 2 server – telnet plnt07


Prompt	Response
login:	dt2http
password:	dt2http
domain:	perf
D:\DT2Files\dt2http>	%START_MFG%



- If you enter text it will not appear in the listener bar

DT2\_NT\_320
NT Considerations

### Configuring Telnet on NT, cont.




## Configuring Telnet on NT (cont'd)

QAD DESKTOP TRAINING

- Test Telnet logon for the Telnet Maintenance Userid and record the prompt and response format and case
- Telnet to the Desktop 2 server – telnet plnt07


Prompt	Response
login:	dt2telnet
password:	dt2telnet
domain:	perf
D:\DT2Files\dt2telnet>	%START_MFG%



- If you enter text it will appear in the listener bar

DT2\_NT\_330
NT Considerations

**Configuring Telnet on NT, cont.**




## Defining HTTP Maintenance Logon

QAD DESKTOP TRAINING

- The logon sequence for HTTP Maintenance is specified in the Connection Manager
  - Select - Functions
  - Then - Update Configuration Settings
  - Enter the prompts and responses separated by a pipe

Startup Script: `login:|dt2http|password:|dt2http|domain:|perf|dt2http>|}%START_MFG%`


Enter only enough characters to insure a unique pattern match



- This information is saved in the telnetStartupScript variable of the config.xml file located in the tomcat\webapps\desktop\WEB-INF\conf directory

DT2\_NT\_340
NT Considerations

## Defining HTTP Maintenance Logon



## Defining Telnet Maintenance Logon

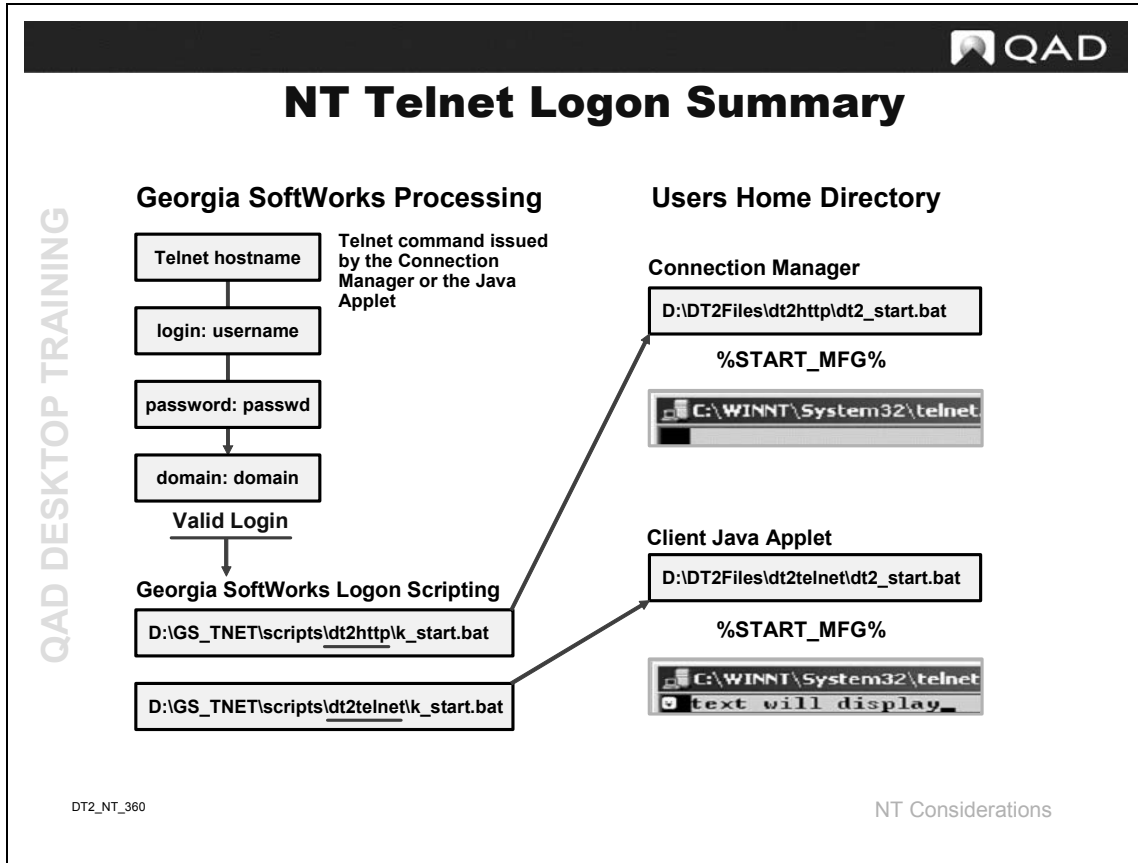
- The logon sequence for Telnet Maintenance is specified User Option Telnet Maintenance 36.20.10.3

Sequence	Script Pattern	Script Value
• 1	• <b>login:</b>	• <b>dt2telnet</b>
• 2	• <b>password:</b>	• <b>dt2telnet</b>
• 3	• <b>domain:</b>	• <b>perf</b>
• 4	• <b>D:\DT2Files\dt2telnet&gt;</b>	• <b>%START_MFG%</b>


Note all case sensitivities

DT2\_NT\_350
NT Considerations

### Defining Telnet Maintenance Logon



## NT Telnet Logon Summary



## NT Processes

- To validate the NT Processes use the Windows Task Manager

QAD DESKTOP TRAINING

Applications | Processes | Performance


Image Name	PID	Username	CPU	CPU Time	Mem Us...
_progres.exe	1136	dt2http	00	0:00:00	8,712 K
_progres.exe	3544	dt2http	00	0:00:01	8,716 K
_progres.exe	3556	dt2http	00	0:00:00	8,712 K
_progres.exe	3564	dt2http	00	0:00:00	8,712 K
_progres.exe	3572	dt2http	00	0:00:00	8,716 K

Applications | Processes | Performance

Image Name	PID	Username	CPU	CPU Time	Mem Us...
GS_Agnt.exe	2476	SYSTEM	00	0:00:02	2,248 K
GS_Agnt.exe	2808	SYSTEM	00	0:00:01	2,252 K
GS_Agnt.exe	2852	SYSTEM	00	0:00:04	2,252 K
GS_Agnt.exe	3116	SYSTEM	00	0:00:03	2,252 K
GS_Agnt.exe	3528	SYSTEM	00	0:00:02	2,252 K

DT2\_NT\_370
NT Considerations

## NT Processes



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## NT Processes (cont'd)

- Promon can also be used

```

Enter your selection: 8
usr  pid  time of login  user id  tty
5    3556 Thu Aug 29 13:07:36 2002  dt2http  CON:
6    3564 Thu Aug 29 13:07:36 2002  dt2http  CON:
7    1136 Thu Aug 29 13:07:36 2002  dt2http  CON:
8    3544 Thu Aug 29 13:07:36 2002  dt2http  CON:
9    3572 Thu Aug 29 13:07:36 2002  dt2http  CON:
    
```


```

Rec Lock Waits    0 %   BI Buf Waits    0 %   AI Buf Waits
Writes by APW    0 %   Writes by BIW   0 %   Writes by AIW
Buffer Hits      95 %
DB Size          158 MB   BI Size         9336 K   AI Size
FR chain         1 blocks  RM chain        17 blocks
Shared Memory    1399 K   Segments        1
0 Servers, 5 Users (5 Local, 0 Remote, 0 Batch),0 Apws
    
```

DT2\_NT\_380

NT Considerations


### NT Processes, cont.



## Course Overview


QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ◆ URL Links
- ◆ Client Installation
- ◆ Processor Editor
- ◆ Multi-Systems
- ◆ Deployment
- ◆ Performance and Tuning
- ◆ Oracle Considerations
- ◆ Troubleshooting

DT2\_NT\_390NT Considerations 

CHAPTER 6

# Desktop Installation



## Overview

QAD DESKTOP TRAINING

- How does it all work?
- New features in Desktop 2.5
- Preparation for Install
- Desktop Installation
- Tomcat Configuration

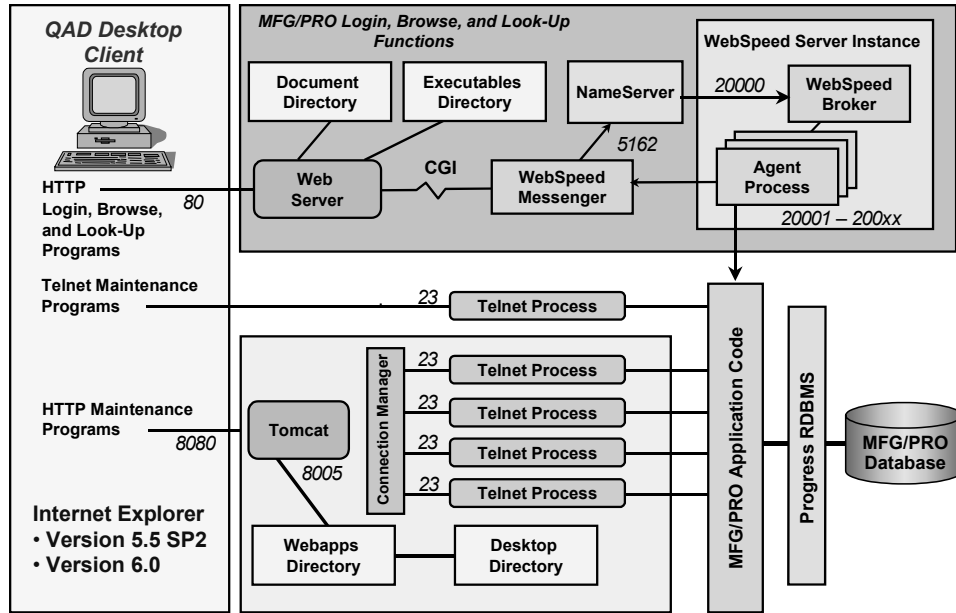
DT2\_DC\_010a

## Desktop Components Overview



## How does it all work?


QAD DESKTOP TRAINING



DT2\_DC\_020a Values indicate assigned port numbers

## How Does It all Work?





## New Features in Desktop 2.5

QAD DESKTOP TRAINING

- Multi-tier installations
- Multiple configurations
- Values specified during the installation and configuration are validated where possible
- Tool that generates WebSpeed broker entry
- ubroker.properties file

DT2\_DC\_030a

## New Features in Desktop 2.5




## New Features in Desktop 2.5

QAD DESKTOP TRAINING

- Tool that creates telnet and Connection Manager scripts
- Tool that prints configuration information
- Resolved permission issues so there is no need to `chmod -R 777` on Apache, Tomcat, and MFG/PRO com directories

DT2\_DC\_040a

**New Features in Desktop 2.5, cont.**



### Install Pre-Requisites for DT 2.5 Things you need to know!!

QAD DESKTOP TRAINING

- Web Server
  - Scripts Directory
  - Docs Directory
- MFG/PRO
  - eB (+ current SP) or eB2 (+ current SP)
  - SP Level
- Progress
  - 9.1D only
- Tomcat
  - Install directory

DT2\_DC\_050a

## Install Pre-Requisites



## Preparation for Desktop Install

QAD DESKTOP TRAINING


### Desktop.pf

- Needs to match this pattern:  
-db /path/to/qaddb -ld qaddb -trig triggers  
-db /path/to/adm -ld qadadm  
-db /path/to/help -ld qadhelp  
-d mdy -yy 1960 -Bt 350 -c 30 -D 100  
-mmax 3000 -nb 200 -s 63

NOTE: this is for Shared Memory access

DT2\_DC\_060a

## Preparation for Desktop Install



## Preparation for Desktop Install

QAD DESKTOP TRAINING

- MFG/PRO is installed and SP applied.
- Character is working.
- Java is installed for tomcat.

DT2\_DC\_070a

**Preparation for Desktop Install, cont.**




## Desktop Installation

QAD DESKTOP TRAINING

- Install Media from CD or download file
- “install.ksh” script
- Configure desktop (MFGUTIL)
- Build Desktop (MFGUTIL)
- WebSpeed
- Tomcat
- Configure Connection Manager
- Configure Telnet connections

DT2\_DC\_080a

## Desktop Installation



## Desktop Installation - system

QAD DESKTOP TRAINING

```
sfl@mfgpro:/apps/dt25
guide for additional information.

Use /home/mfg/mfgsvr as log directory?
Default is 'y'
->

*** Configuration file selection ***

Please choose one of the following:

    1: train1_dt2.ini -> train1
    2: train_dt2.ini -> train
    3: Create new configuration
    4: Cancel
<1-4>? 1
*** Configuration:  train1 ***

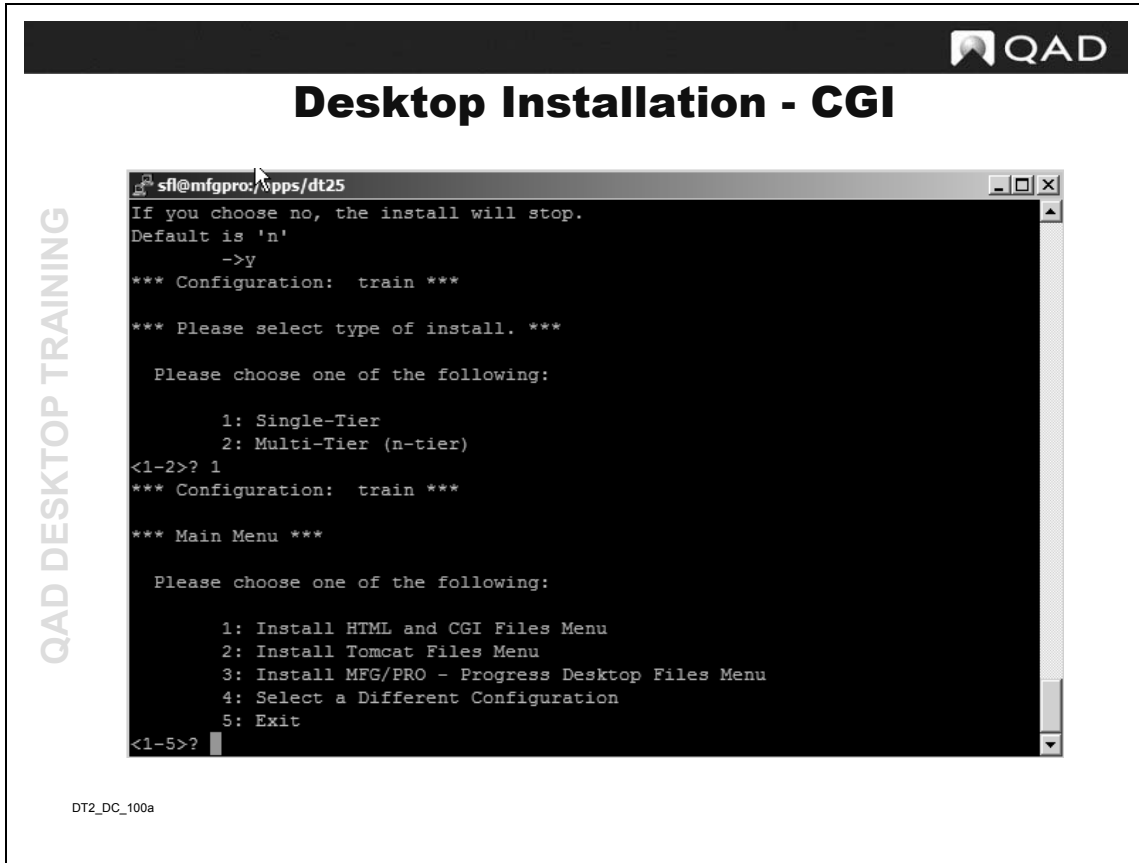
*** Please select type of install. ***

Please choose one of the following:


    1: Single-Tier
    2: Multi-Tier (n-tier)
<1-2>? |
```

DT2\_DC\_090a

**Desktop Installation, cont.**



### Desktop Installation, cont.



## Desktop Installation - CGI

QAD DESKTOP TRAINING

```
sfl@mfgpro:/apps/dt?5
*** Configuration+ train ***

*** HTML / CGI Menu ***

Please choose one of the following:

    1: Install HTML and CGI Files
    2: Uninstall HTML and CGI Files
    3: Return to Main Menu

<1-3>? 1


Please enter the Web Server's port number (usually this is 80).
Default is '80'
->

Please enter the Web Server's document root directory.
Default is '/var/www/html'
->

Please enter the name of the directory under '/var/www/html'
where the HTML files will be placed.
Usually this is the same as the configuration name.
Default is 'train'
->
```

DT2\_DC\_110a

### Desktop Installation, cont.



## Desktop Installation - CGI

QAD DESKTOP TRAINING

```
sfl@mfgpro:/apps/dt25
Usually this is the same as the configuration name.
Default is 'train'
->
Directory /var/www/html/train exists.
Ok to overwrite?
Default is 'y'
->

Please enter the full path to the directory where the cgi-bin files
will be placed for this configuration.


Default is '/var/www/cgi-bin'
->
Directory /var/www/cgi-bin exists.
Ok to overwrite?
Default is 'y'
->

Please enter the ScriptAlias which refers to /var/www/cgi-bin
Generated HTML links will use this ScriptAlias name to point to the cgi-bin dire
ctory.

Default is 'cgi-bin'
->
```

DT2\_DC\_120a

### Desktop Installation, cont.



## Desktop Installation - Tomcat

QAD DESKTOP TRAINING

```
sf1@mfgpro:/apps/dt25
Please choose one of the following:
    1: Install HTML and CGI Files
    2: Uninstall HTML and CGI Files
    3: Return to Main Menu
<1-3>? 3
*** Configuration:  train1 ***


*** Main Menu ***

Please choose one of the following:
    1: Install HTML and CGI Files Menu
    2: Install Tomcat Files Menu
    3: Install MFG/PRO - Progress Desktop Files Menu
    4: Select a Different Configuration
    5: Exit
<1-5>? 2
Java must be installed on this machine.

Please enter the JAVA_HOME directory for this machine.
No default value
->
```

DT2\_DC\_130a

### Desktop Installation, cont.



## Desktop Installation - Tomcat

QAD DESKTOP TRAINING

```
sfl@mfgpro:/apps/dt25
Please enter the JAVA_HOME directory for this machine.
No default value
->/usr/java/j2sdk1.4.1_07
Java version on machine 'mfgpro' is 1.4.1_07
*** Configuration: train1 ***

*** Tomcat Menu ***

Please choose one of the following:


1: Install Tomcat Files
2: Uninstall Tomcat
3: Return to Main Menu
<1-3>? 1

Please enter the Tomcat installation directory.
No default value
->/apps/tomcat

The directory '/apps/tomcat' exists.
Files may be overwritten in, or deleted from this directory.
Do you want to use this directory?
Default is 'y'
->
```

DT2\_DC\_140a

### Desktop Installation, cont.



## Desktop Installation - Tomcat

QAD DESKTOP TRAINING

```
sfl@mfgpro:/apps/dt25
<1-3>? 1

Please enter the Tomcat installation directory.
Default is '/apps/tomcat'
->

The directory '/apps/tomcat' exists.
Files may be overwritten in, or deleted from this directory.
Do you want to use this directory?
Default is 'y'
->

Please enter the Tomcat port number .
Default is '8080'
->

Existing Tomcat installation found at '/apps/tomcat'.
Existing Tomcat installation version is 4.1.24.
Existing Tomcat is not running on port 8080.

The current installed version of Tomcat is compatible with Desktop 2.
Do you want to install the 'train' web application in this Tomcat installation?
Answering 'n' will return you to the Tomcat main menu.
Default is 'y'
->
```

DT2\_DC\_150a

### Desktop Installation, cont.



## Install MFG/PRO - Programs

QAD DESKTOP TRAINING

```
sf1@mfgpro:/apps/dt25
1: Install HTML and CGI Files Menu
2: Install Tomcat Files Menu
3: Install MFG/PRO - Progress Desktop Files Menu
4: Select a Different Configuration
5: Exit
<1-5>? 3

The JAVA_HOME environment variable for this machine is set to
'/usr/java/j2sdk1.4.1_07'. Is this correct?
Default is 'y'
->
Java version on machine 'mfgpro' is 1.4.1_07
*** Configuration: train ***


*** MFG/PRO - Progress Desktop Files Menu ***

Please choose one of the following:

1: Install MFG/PRO - Progress Desktop Files
2: Update Additional MFG/UTIL Installations
3: Launch MFG/UTIL
4: Uninstall MFG/PRO - Progress Desktop Files
5: Return to Main Menu
<1-5>? 
```

DT2\_DC\_160a

## Install MFG/PRO



## Install MFG/PRO - Programs

QAD DESKTOP TRAINING

```
sfl@mfgpro:/apps/dt25
*** MFG/PRO - Progress Desktop Files Menu ***

Please choose one of the following:

    1: Install MFG/PRO - Progress Desktop Files
    2: Update Additional MFG/UTIL Installations
    3: Launch MFG/UTIL
    4: Uninstall MFG/PRO - Progress Desktop Files
    5: Return to Main Menu

<1-5>? 1

Please specify the MFG/PRO Client directory.
No default value
->/apps/mfgpro/eb2

Please specify the MFG/PRO Desktop code directory.
The Desktop Progress code files will be extracted here.
Default is '/apps/mfgpro/eb2/train1'
->

The directory '/apps/mfgpro/eb2/train1' does not exist. Would you like to
create this directory?
Default is 'y'
->
```

DT2\_DC\_170a

### Install MFG/PRO, cont.

QAD

## Desktop Configuration


QAD DESKTOP TRAINING



```
sfl@mfgpro:/apps/mfgpro/eb2
File Database Programs DataServer Scripts Configure Desktop Help
Configure Desktop Environment Parameters
Build Desktop
Print Desktop Configuration Information
Generate Sample ubroker.properties File
Create Desktop Archive Files
Create Connection Manager and telnet scripts
Edit Search Directories for Desktop Configuration Lookups
MFG / UTIL
```

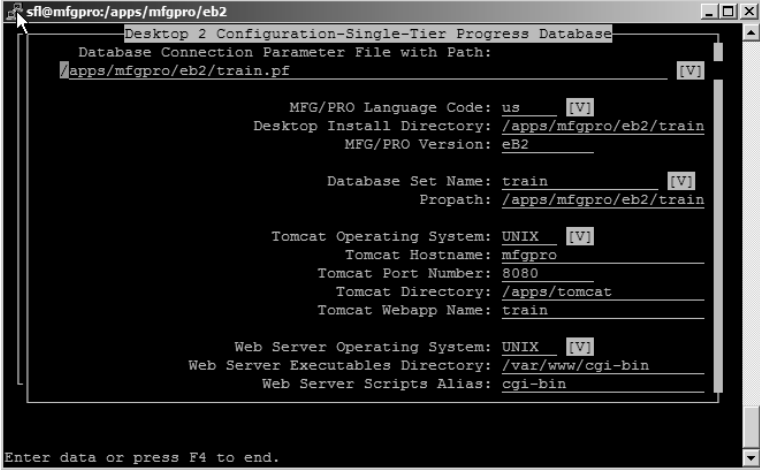
DT2\_DC\_180a

### Desktop Configuration



## Configure Desktop Environment


QAD DESKTOP TRAINING



Enter data or press F4 to end.

DT2\_DC\_190a

## Configure Desktop Environment



## Build Desktop

QAD DESKTOP TRAINING

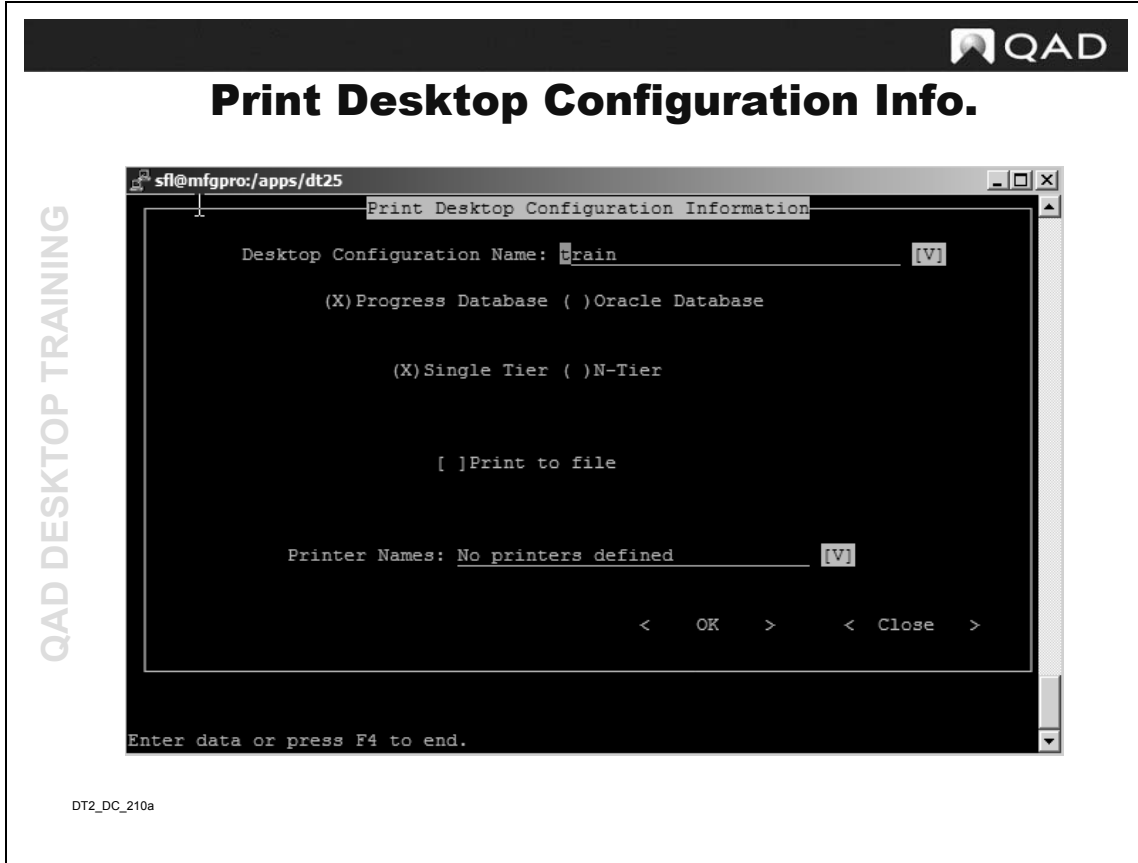
sfl@mfgpro:/apps/dt25

Build Desktop on Progress Database


Desktop Configuration Name: <u>train</u>	[V]	Validated for build
DB Connection -pf File: <u>/apps/mfgpro/eb2/train.pf</u>		[ ]
Desktop Install Directory: <u>/apps/mfgpro/eb2/train</u>		
(X) Single Tier ( ) N-Tier	MFG/PRO Version: <u>eB2</u>	Language: <u>us</u>
		Max Search: <u>20</u>
Propath: <span style="border: 1px solid gray; padding: 2px;">/apps/mfgpro/eb2/train, ./apps/mfgpro/eb2, /apps/mfgpro/eb2/xrc</span>		
< Build >   < Advanced >   <Web/WebSpeed Info>   <Tomcat Info>   < Close >		
GO=Build, Ctrl-A=Advanced, Ctrl-W=Web/WebSpeed, Ctrl-T=Tomcat		

DT2\_DC\_200a

## Build Desktop



### Print Desktop Configuration Information



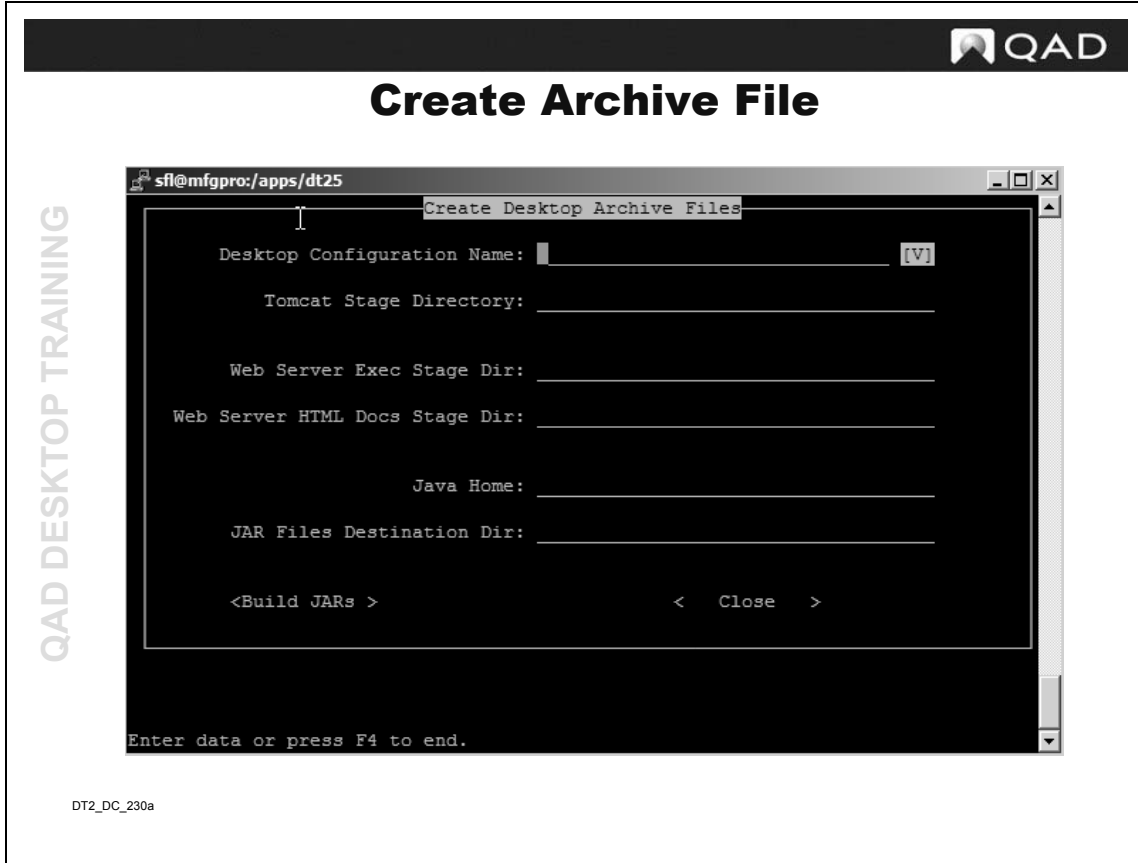
## Ubroker.properties file

QAD DESKTOP TRAINING

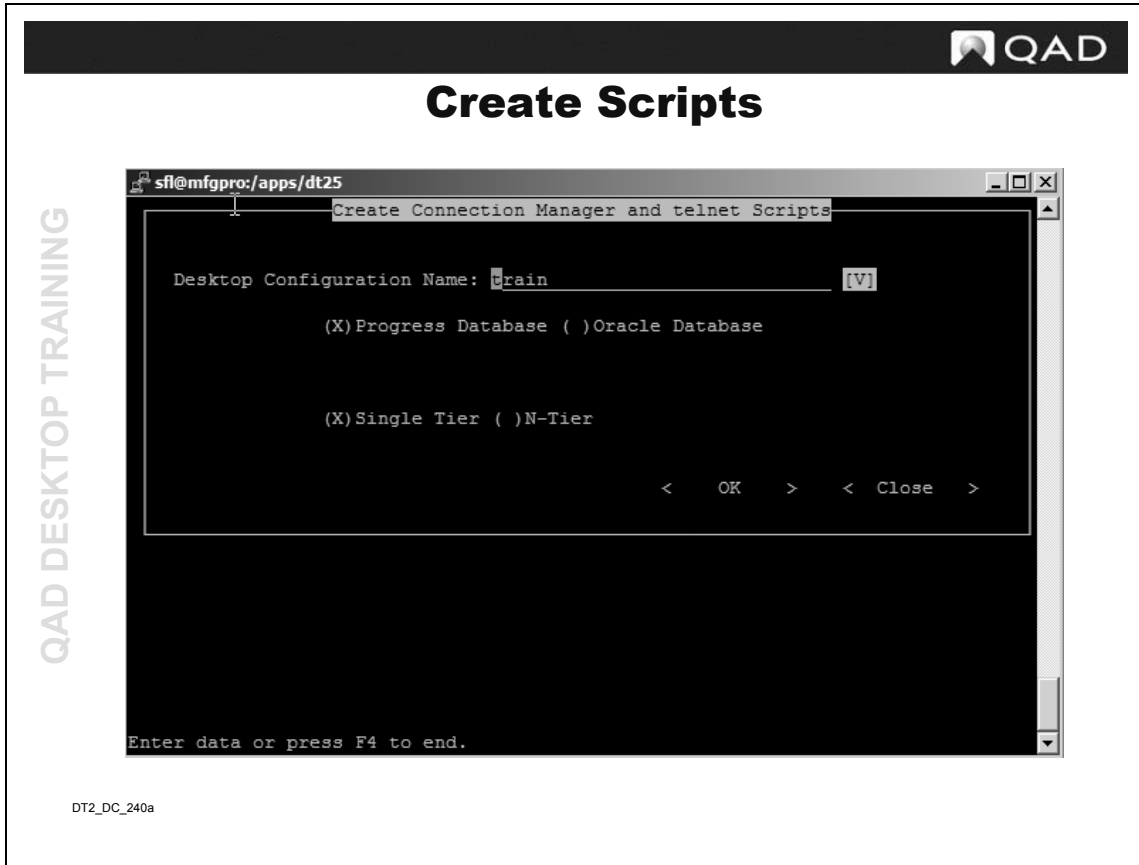
```
sfl@mfgpro:/apps/mfgpro/eb2
[sfl@mfgpro eb2]$ more train-*
[UBroker.WS.train]
  appserviceNameList=train
  brokerLogFile=/apps/mfgpro/eb2/train/train.broker.log
  controllingNameServer=NS1
  portNumber=20000
  PROPATH=/apps/mfgpro/eb2/train/com/mfgpro,/apps/mfgpro/eb2/train,./apps/mfg
pro/eb2,/apps/mfgpro/eb2/bbi
  requestTimeout=30
  srvrLogFile=/apps/mfgpro/eb2/train/train.server.log
  srvrMaxPort=20100
  srvrMinPort=20001
  srvrStartupParam=-p web/objects/web-disp.p -weblogerror -pf /apps/mfgpro/eb2
/train.pf
  uuid=581214dd4810c6fc:6798266c:fb1cd7eedb:-8000
  workDir=/apps/mfgpro/eb2/train
  environment=train
#
[sfl@mfgpro eb2]$
```

DT2\_DC\_220a


### Ubroker.properties File



## Create Archive File



## Create Scripts




## WebSpeed Verification

QAD DESKTOP TRAINING

- Add information to ubroker.properties file.
  
- 1. Start Progress admin server  
`proadsv -start`
- 2. Start WebSpeed agent  
`wtbman -name [agent name] -start`
- 3. Query agent  
`wtbman -name [agent name] -query`
- 4. Test agent access  
`http://dttrain.train.qad.com/cgi-bin/dtuser[#]/cgiip.sh/WService=[agent name]/ping`

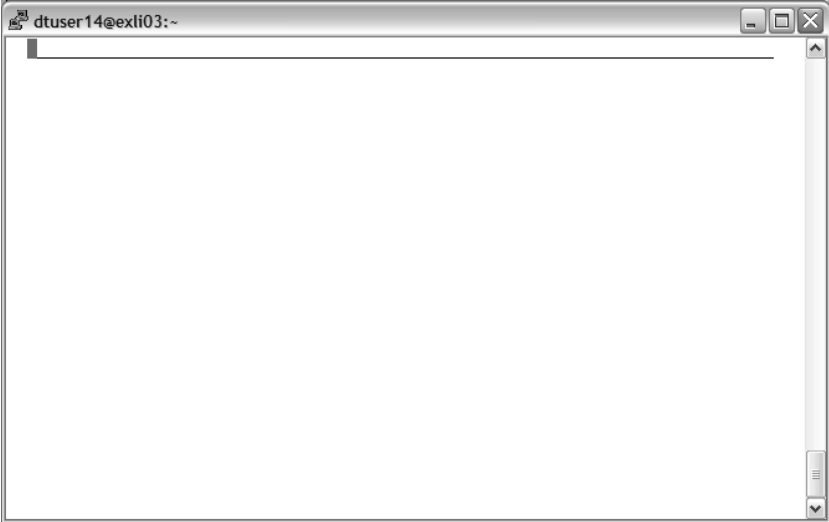
DT2\_DC\_250a

## WebSpeed Verification



## Tomcat Telnet Script

- Test it...  
./connmgr.train




The image shows a terminal window titled 'dtuser14@exli03:~'. The window is currently blank, indicating that the command has been executed but no output is visible. The terminal window has standard window controls (minimize, maximize, close) and a scroll bar on the right side.

QAD DESKTOP TRAINING

DT2\_DC\_260a

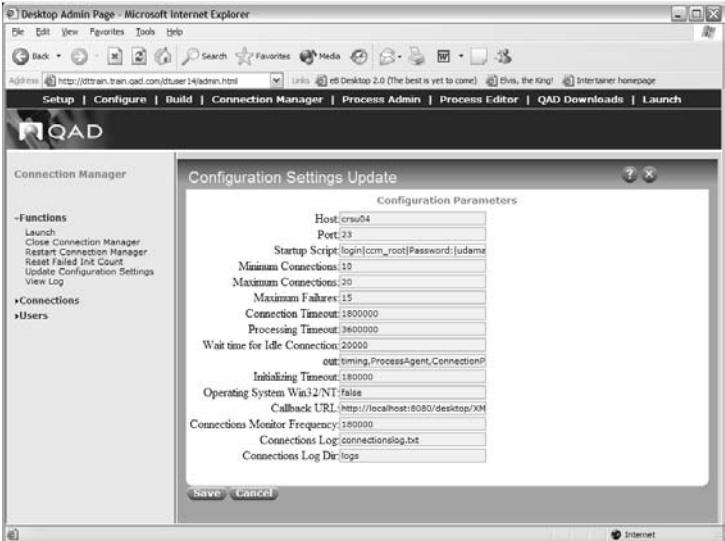
## Tomcat Telnet Script

QAD DESKTOP TRAINING




## Tomcat Connection Manager

- Click “Functions”
- Click “Update Configuration Settings”



DT2\_DC\_270a

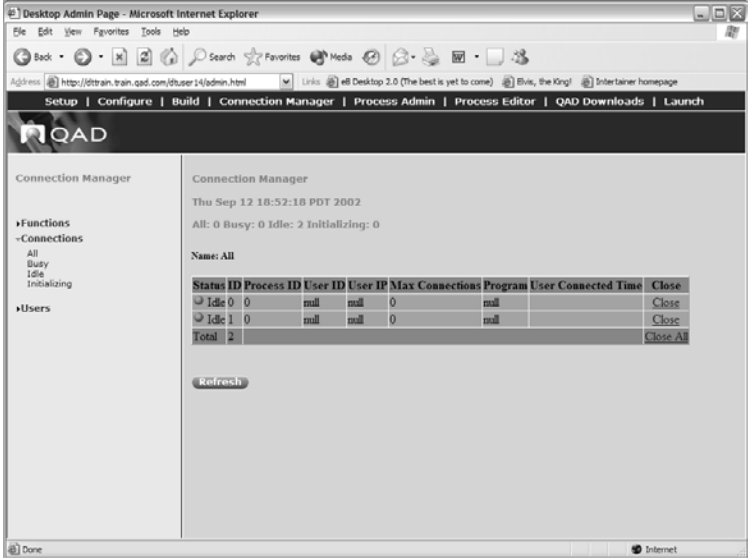
### Tomcat Connection Manager



## Tomcat Connection Manager

- Check for Idle sessions
  - Connections -- All


QAD DESKTOP TRAINING



Status	ID	Process ID	User ID	User IP	Max Connections	Program	User	Connected Time	Close
Idle	0		mail	mail	0	mail			Close
Idle	1		mail	mail	0	mail			Close
<b>Total</b>									<b>2</b>

DT2\_DC\_280a

**Tomcat Connection Manager, cont.**



## Example of Telnet File

```

#!/bin/sh
# Script to start multi-user session of MFG/PRO
# tokens:
# &DLC = Progress Directory
# &CLIENT-DB-CONNECT = command line to connect to each db in dbset
stty intr '^c'
DLC=/dr01/progress/dlc91d;export DLC
PATH=$PATH:$DLC;export PATH
PROMSGS=$DLC/promsgs;export PROMSGS
PROTERMCAAP=$DLC/protermcap;export PROTERMCAAP
PS1='$$ ';export PS1
PROPATH=.,/dr02/mfgpro/eB2pro/com/qad/mfgpro,/dr02/mfgpro/eB2pro,/dr02/mfgpro/eB2pro/bb
i,/dr02/mfgpro/eB2pro/xrc;export PROPATH


# Set terminal type.
#
if [ ${TERM:-NULL} = NULL ]
then
    echo
    echo "Please enter your terminal type: \c"
    read TERM
    export TERM
fi
#
# Start MFG/PRO.
#

# exec $DLC/bin/_progres &DB etc
$DLC/bin/_progres -c 30 -d mdy -yy 1920 -Bt 350 -D 100 -mmax 3000 -nb 200 -s 63 -
noshvarfix -p mfwb01a.p -pf /dr02/mfgpro/eB2pro/Production.pf

DT2_DC_290a

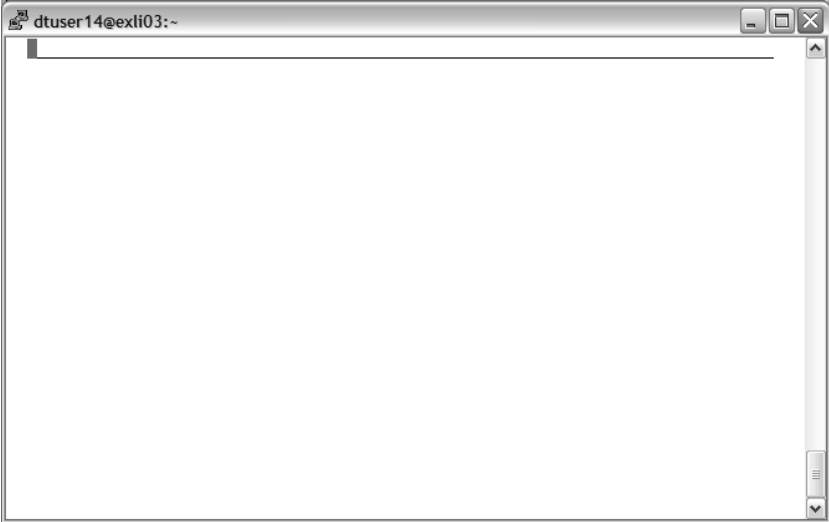
```

## Example of Telnet File



## Defining Telnet Session Script


- Test it...  
./telnet.train



DT2\_DC\_300a

QAD DESKTOP TRAINING

### Defining Telnet Session Script




## Defining Telnet User for MFG/PRO

QAD DESKTOP TRAINING

- Establish login settings for Desktop telnet sessions
  - User Option Telnet Maintenance (36.20.10.3)
- Each line in a telnet log-in script is a single chui\_det record containing a combination of three values: pattern, value, and status

DT2\_DC\_310a

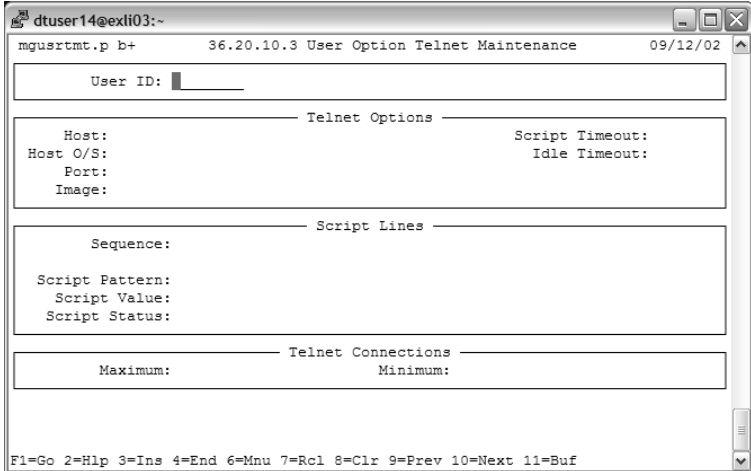
### Defining Telnet User for MFG/PRO



## Defining Telnet Connections


QAD DESKTOP TRAINING

- Run MFG/PRO Character  
/home/dtuser[#]/test.dtuser[#]
- 36.20.10.3 – Telnet maint



DT2\_DC\_320a

## Defining Telnet Connections



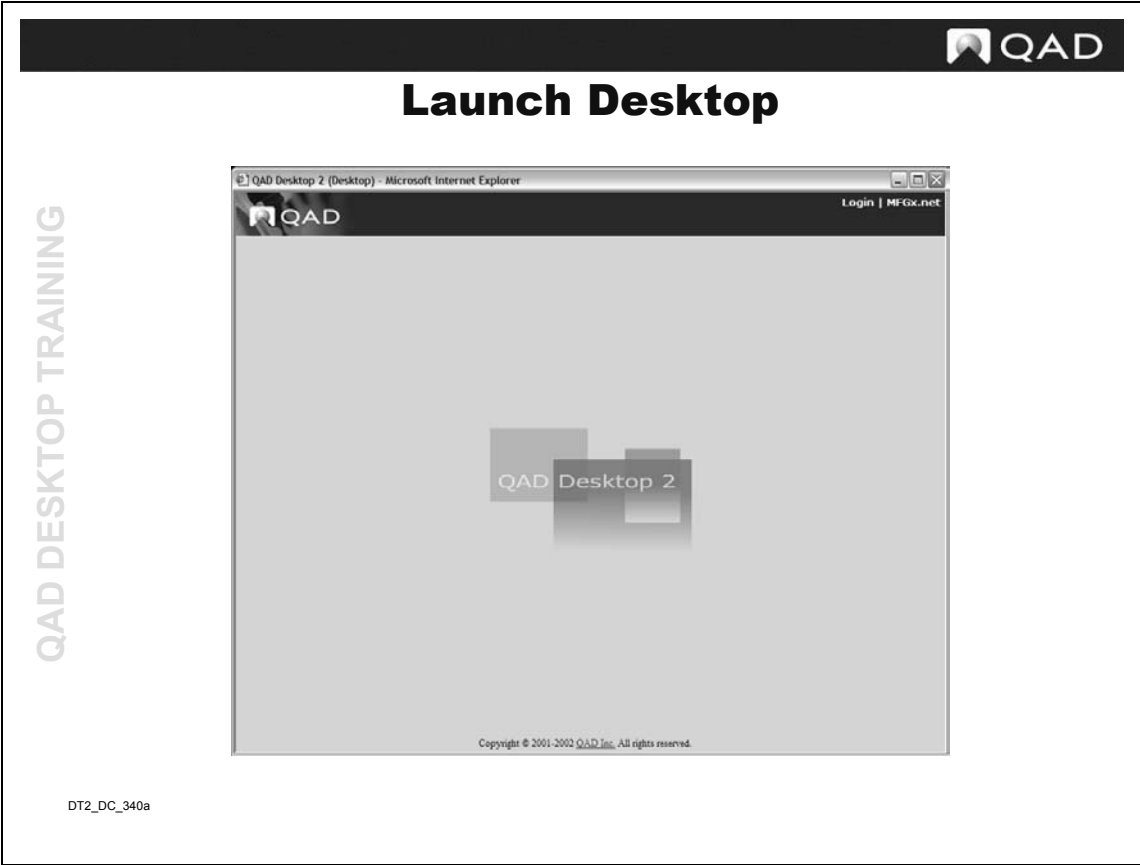
## Defining Telnet Connections

QAD DESKTOP TRAINING

- Values:
  - User ID: \*
  - Host: *hostname*
  - Host O/S: unix
  - Port: 23
- Sequence
  - 1 Pattern: login: Value: *user name*
  - 2 Pattern: Password: Value: *password*
  - 3 Pattern: \$ Value: *./telnet.sh*
- Maximum: 3
- Minimum: 0

DT2\_DC\_330a

**Defining Telnet Connections, cont.**

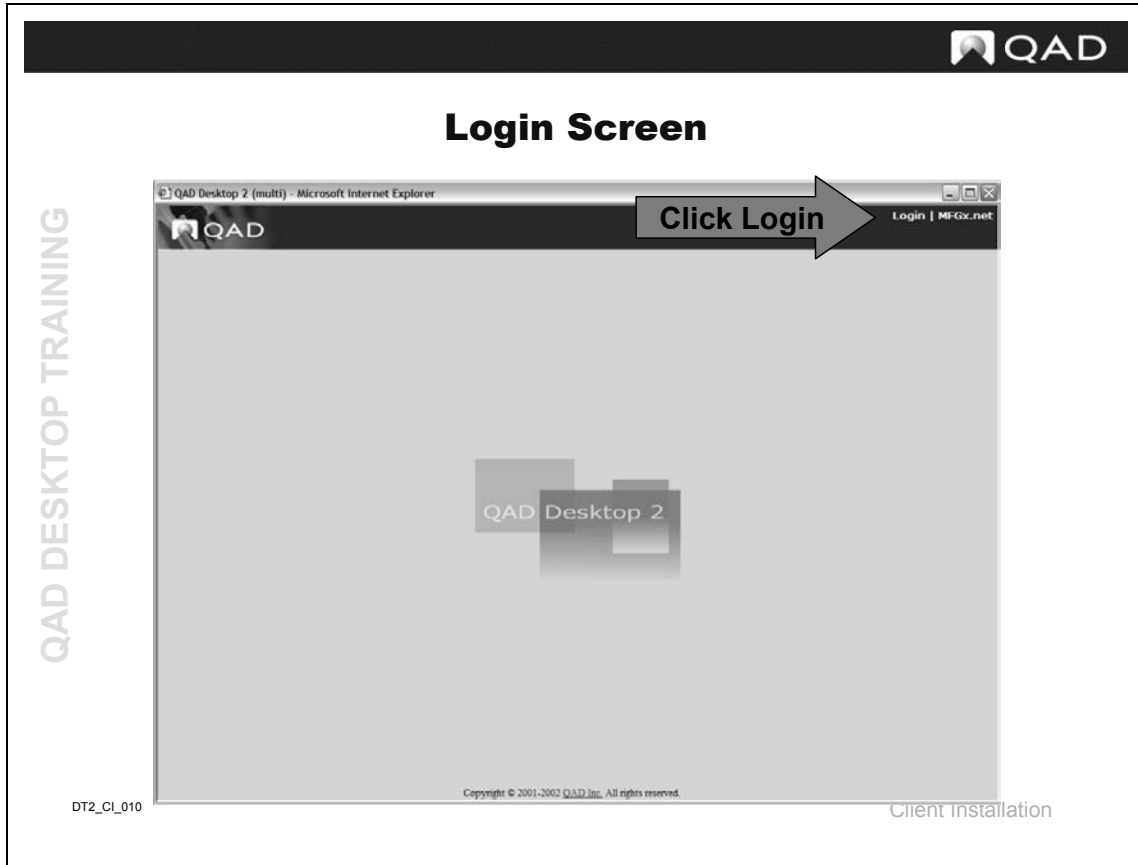


# Launch Desktop

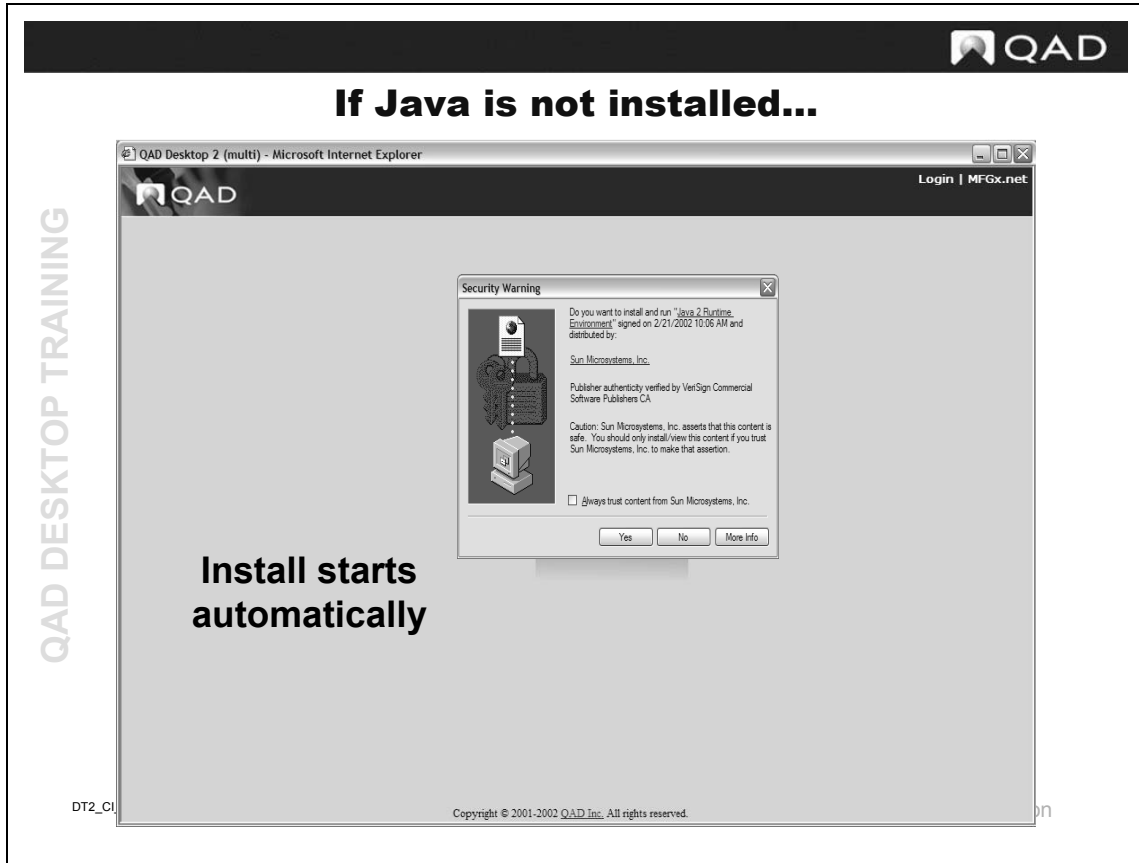


CHAPTER 7

# Client Installation



## Client Installation



**If Java Is Not Installed...**



**If Java Is Not Installed..., cont.**



If Java Is Not Installed..., cont.



**If Java Is Not Installed..., cont.**

**QAD**

## Sign-on to MFG/PRO

**Enter your:**  
**User ID**  
**Password**  
**Then click OK**

**MFG/PRO Sign-on**

**QAD**

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Copyright 1986-2000 QAD, Inc. All rights reserved.

User ID:

Password:

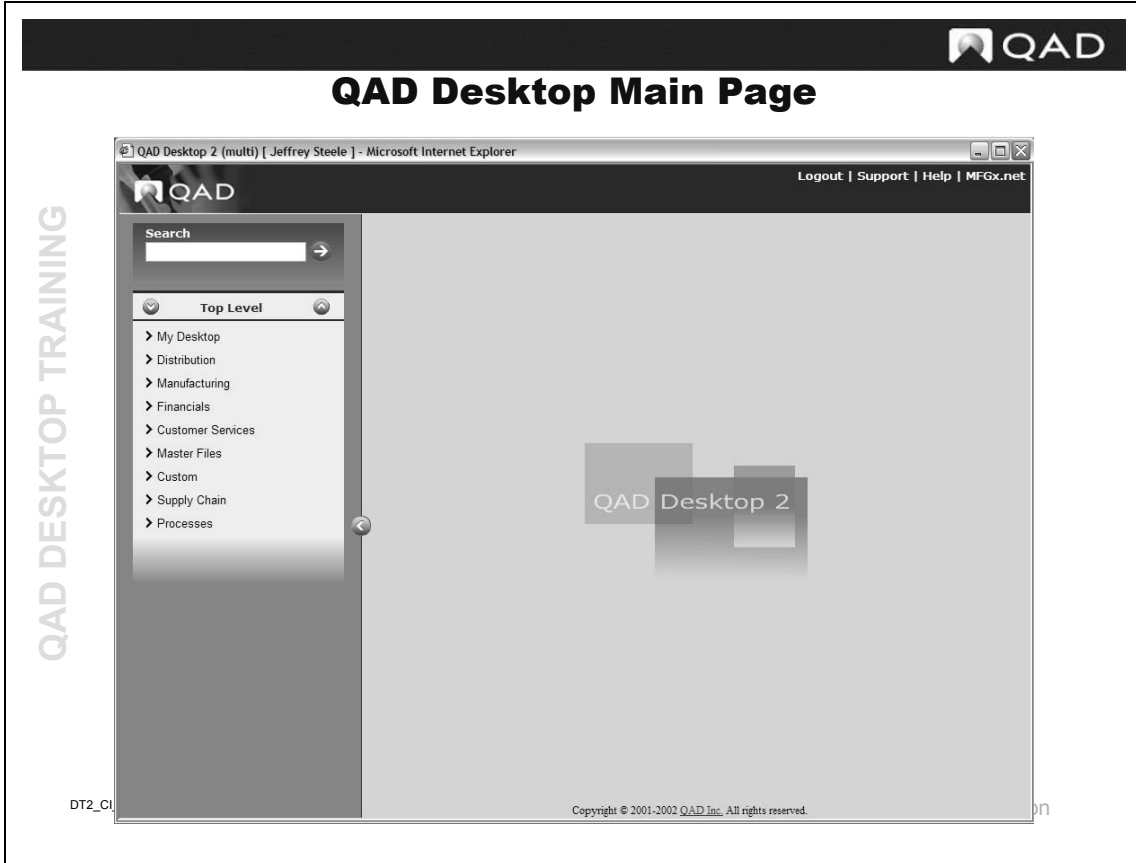
OK Cancel Help

DT2\_CI

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**QAD DESKTOP TRAINING**

### Sign-on to MFG/PRO



QAD Desktop Main Page



## Course Overview

QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ✓ Client Installation
  - ◆ Processor Editor
  - ◆ Multi-Systems
  - ◆ Deployment
  - ◆ Performance and Tuning
  - ◆ Oracle Considerations
  - ◆ Troubleshooting

DT2\_CL\_080


Client Installat





CHAPTER 8

# Post-Installation Configuration




## URL Links Overview

QAD DESKTOP TRAINING

- URL Management
- Session Monitoring
- Summary

DT2\_UL\_010 URL Links

## URL Links Overview



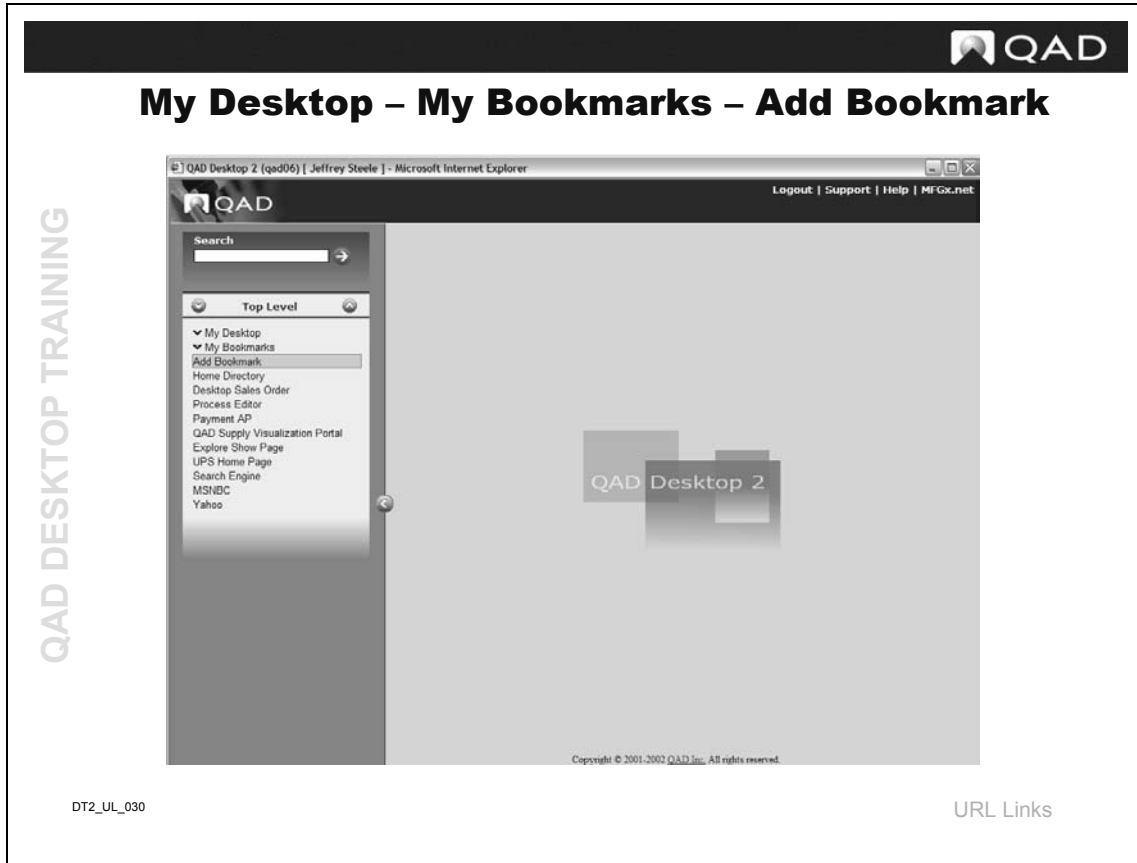
## URL Management

QAD DESKTOP TRAINING


- Menu URL Maintenance
  - Assign intranet/internet URLs to the User URL's Menu

DT2\_UL\_020URL Links

## URL Management



## My Desktop - My Bookmarks - Add Bookmark



## 36.20.10.8 – Menu URL Maintenance

QAD DESKTOP TRAINING

Menu URL Maintenance - Microsoft Internet Explorer

Menu URL Maintenance

User ID: \*

URL to execute:

← →

**URL Data**


Description: QAD Supply Visualization Portal

GIF File Name:

Add Link

DT2\_UL\_040 URL Links

### 36.20.10.8 - Menu URL Maintenance



## URL Management

QAD DESKTOP TRAINING

- Browse URL Maintenance
  - Assign intranet/internet URLs to data fields
  - Fields shown in browses can link to URLs

DT2\_UL\_050URL Links

## URL Management

## 36.20.10.11 – Browse URL Maintenance

QAD DESKTOP TRAINING

mgburimt.p - Microsoft Internet Explorer

Browse URL Maintenance

Browse:

User ID:

Field Name:  Value:

---

Defined URL

URL:

Description: Yahoo Search  
Primary: Yes

---

URL Script:  Determine: No

---

Defined URL Parameters

Fields In Browse	URL Substitution String
>cm_addr	#b#cm_addr#e#
cm_sort	#b#cm_sort#e#
ad_phone	#b#ad_phone#e#


---

F1=Go 2=Help 3=Ins 4=End 7=Recall 8=Clear 9=Prev 10=Next

Add Link

DT2\_U
http://search.yahoo.com/bin/search?p=#b#cm\_sort#e#

### 36.20.10.11 - Browse URL Maintenance



## 36.20.10.11 – Browse URL Maintenance


QAD DESKTOP TRAINING

2.1.2 Customer Browse (adbr001.p) 09/16/02 09:44

Customer	Sort Name	Telephone	City	State	Post	R
00010001	Anheuser-Busch Company			MO	63118	
00010005	Test			UT		
001	PEI Computers Ltd.		Avonlea	PEI	A1A A1A	
0100	Hans Maier GmbH		Frankfurt			
0100-R	Maier Hans GmbH Buchhaltung		Frankfurt		60282	
01000000	Colossal Conglomerates LTD	1-800-333-9000	Evanston	IL	090876	IN
01000009	SSM Customer, Sample		Carpinteria	CA	93013	1
1001000	CENTURY HALLMARK	213-920-0394	Los Angeles	CA	89000	L
10010001	Westwood Reliable	213-923-0293	Westwood	CA	89029	L
10010003	Reliable Center		New York	NY	02929	L
10010004	Gateway Reliable	714-293-0293	San Francisco	CA	92838	L
1004000	Worldwide Supply	313-932-0239	Kansas City	MI	48802	IN
1005000	Universal Industries	714-874-1000	Industry	CA	92376	IN
1006000	Sterling Industries		New York	NY	10001	L
1007000	Supply Warehouse		Kansas City	MI	72939	L
1008000	Custom Homes and Buildings	602-265-5656	Phoenix	AZ	85028	L
1009000	EnviroCar		San Diego	CA	92211	L
1010000	Products Warehouse	602-350-0200	Phoenix	AZ	85044	L
120	DEMO Customer	120-120-1204	Pittsburgh	PA	15293	PA
1504000	Max Deppell Buildings	804-203-0700	Melbourne	VA	22655	PA

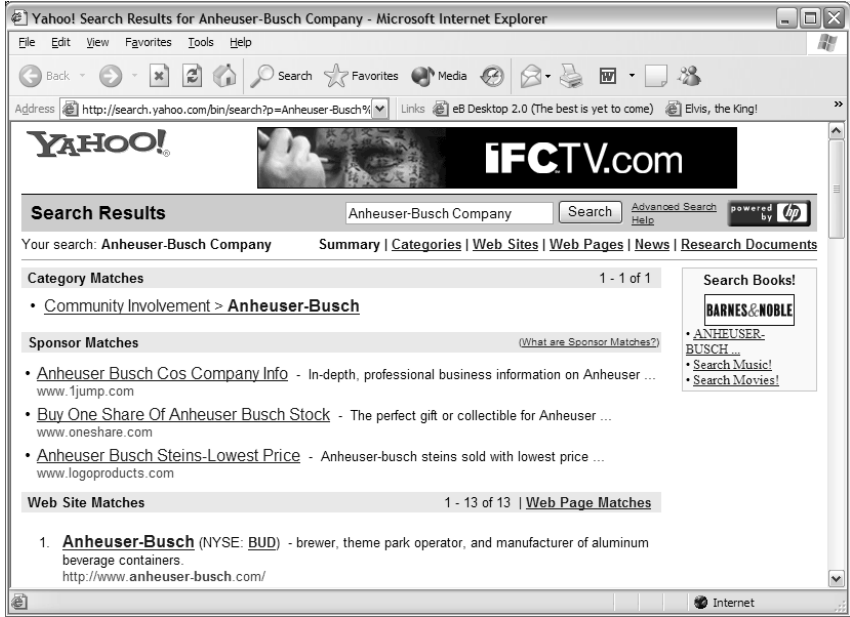
DT2\_UL\_070
URL Links

**36.20.10.11 - Browse URL Maintenance, cont.**




## 36.20.10.11 – Browse URL Maintenance

QAD DESKTOP TRAINING



DT2\_UL\_080
URL Links

**36.20.10.11 - Browse URL Maintenance, cont.**




## Session Monitoring

QAD DESKTOP TRAINING

- **Session Master Maintenance – 36.20.10.15**
  - No maintenance done in this screen
    - Can be used to delete defunct users
  - Specifies a system generated session ID
  - Reflects data/options setup in:
    - User Options
    - User Telnet Options
    - Web Security
    - General Ledger/Financial
- **Connection Manager**
  - Monitor which users are accessing system / programs
  - View status of connection pools

DT2\_UL\_090 URL Links

## Session Monitoring



## 36.20.10.15 – Session Master Maintenance

QAD DESKTOP TRAINING

Session ID:

User ID: jqs

User Name: Jeffrey Steele

**Session Master**

Client IP Address: 167.3.25.19	Security Profile:
Session Timeout: 300 Mi	Idle Time: 0.10 Min
Active Web: 0	Active Telnet: 1
Number of Records: 100	Menu Substitution: <input checked="" type="checkbox"/>

**Session Context Detail**


Context ID: 1	Logical Database:
GI Entity: 1000	Current Entity: 1000
	Base Currency: USD

[Add Link](#)

DT2\_UL\_100
URL Links

### 36.20.10.15 - Session Master Maintenance

QAD DESKTOP TRAINING



## Connection Manager

http://exli10.qad.com:8080/qad06/ConnectionManager.html - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail

Address http://exli10.qad.com:8080/qad06/ConnectionManager.html Links eB Desktop 2.0 (The best is yet to come) Elvis, the King!

QAD

Connection Manager

- Functions
- Connections
- ▼ Users

Connection Manager

Mon Sep 16 09:48:49 PDT 2002

All: 0 Busy: 1 Idle: 13 Initializing: 0

Name: Busy - jqs

Status	ID	Process ID	User ID	User IP	Max Connections	Program	User Connected Time	Close
Busy	6	26806	jqs	167.3.25.1999		mgsessmt.p	Mon Sep 16 09:48:32 PDT 2002	Close
Total	1							Close All

Refresh

DT2\_UL\_110
URL Links

## Connection Manager



## Summary


QAD DESKTOP TRAINING

- URL Management facilitates ease of use and Web access from within MFG/PRO
- URL Management allows configuration flexibility
- Session Master Maintenance shows an Assigned Session ID and Various Types of User Specific Data and Settings

DT2\_UL\_120

URL Links


## Summary



## Course Overview


QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ◆ Client Installation
- ◆ Processor Editor
- ◆ Multi-Systems
- ◆ Deployment
- ◆ Performance and Tuning
- ◆ Oracle Considerations
- ◆ Troubleshooting

DT2\_UL\_130URL LI 

CHAPTER 9

# Process Editor



## Overview

QAD DESKTOP TRAINING

- What is the Process Editor?
- Benefits
- Installation and Configuration
- Quick Lesson
- Demo

DT2\_PE\_010Process Editor

## Process Editor Overview

## What is the Process Editor?

QAD DESKTOP TRAINING

QAD New | Open | Save | Preview | Help

**Process Information**

Name:   
 Description:   
 Owner:

**Grid Properties**

Rows:  Columns:   
 Height:  Width:   
 Zoom:   
 Show Gridlines  Show Headers

**Style Properties**

Style ID:   
 Font:   
 Font Style:   
 Font Size:   
 Font Weight:   
 Stroke Color:   
 Fill Color:   
 Opacity:   
 Stroke Width:   
 Filter:

**Process Properties**  
 Name:   
 Value:


**Process Diagram**

	A	B	C	D	E
1	Customer Schedule Setup				
2	Customer Plan Schedule Maintenance				
3	Customer Ship Maintenance	Required Ship Scheduled Maintenance	Required Ship Scheduled Update		Schedule Delete/Archive
4			Selective Required Ship Schedule Update		
5	Schedule Inquiry	Schedule History Inquiry	Schedule Report	Schedule Compare	Schedule Authorize Report
6	Back to Order Process				

DT2\_PE\_020
Process Editor

## What is the Process Editor

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## What is the Process Editor?

QAD DESKTOP TRAINING

- Tool for building a model of business process flows
- Clickable image maps with associated URLs
- Based on Scalable Vector Graphics (SVG) format
- Requires a SVG viewer (plug-in)

DT2\_PE\_030Process Editor

**What is the Process Editor, cont.**




## Benefits

QAD DESKTOP TRAINING

- Easy to use
- Create links to:
  - MFG/PRO
  - URLs
  - Images, video, audio, and documents
- SVG advantages
  - Plain text format
  - Scalable
  - Zoomable
  - Searchable and selectable
  - Open Standard
  - True XML

DT2\_PE\_040Process Editor

## Benefits



## Installation and Configuration

QAD DESKTOP TRAINING

- Installs with initial Desktop installation
- Configuration
  - Use HTML page for updates
  - Menu Lookup settings
    - Number of records to display
    - Lookup timeout

DT2\_PE\_050 Process Editor

## Installation and Configuration

**Configuration**

QAD DESKTOP TRAINING

Desktop Admin Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://prnt07.qad.com/desktop/admin.html


Setup | Configure | Build | Connection Manager | Process Admin | Process Editor | QAD Downloads | Launch

HTML configuration page

DT2\_PE\_060

Process Editor

## Configuration



## Process Administration

**Context Parameters**

Help URL	<input type="text" value="http://prnt07.qad.com/desktop/doc/03_ProcessNavigation.html"/>
Menu Lookup Result Size	<input type="text" value="100"/>
Menu Lookup Timeout	<input type="text" value="30"/>
Menu Lookup URL	<input type="text" value="http://prnt07.qad.com/cgi-bin/wspd_cgi.sh/WService=desktop/com/qad/na"/>
SVG Directory	<input type="text" value="WEB-INF/pronav/svg"/>
URL Lookup	<input type="text" value="MenuLookup.jsp"/>
XML Directory	<input type="text" value="WEB-INF/pronav/xml"/>
XSL Path	<input type="text" value="WEB-INF/pronav/xsl/process.xsl"/>


**Lookup Settings**

Process Editor

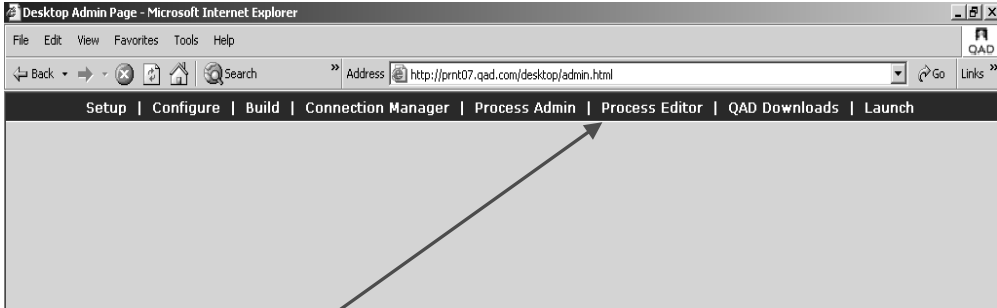
DT2\_PE\_070

QAD DESKTOP TRAINING

## Process Administration



## Starting Up the Process Editor



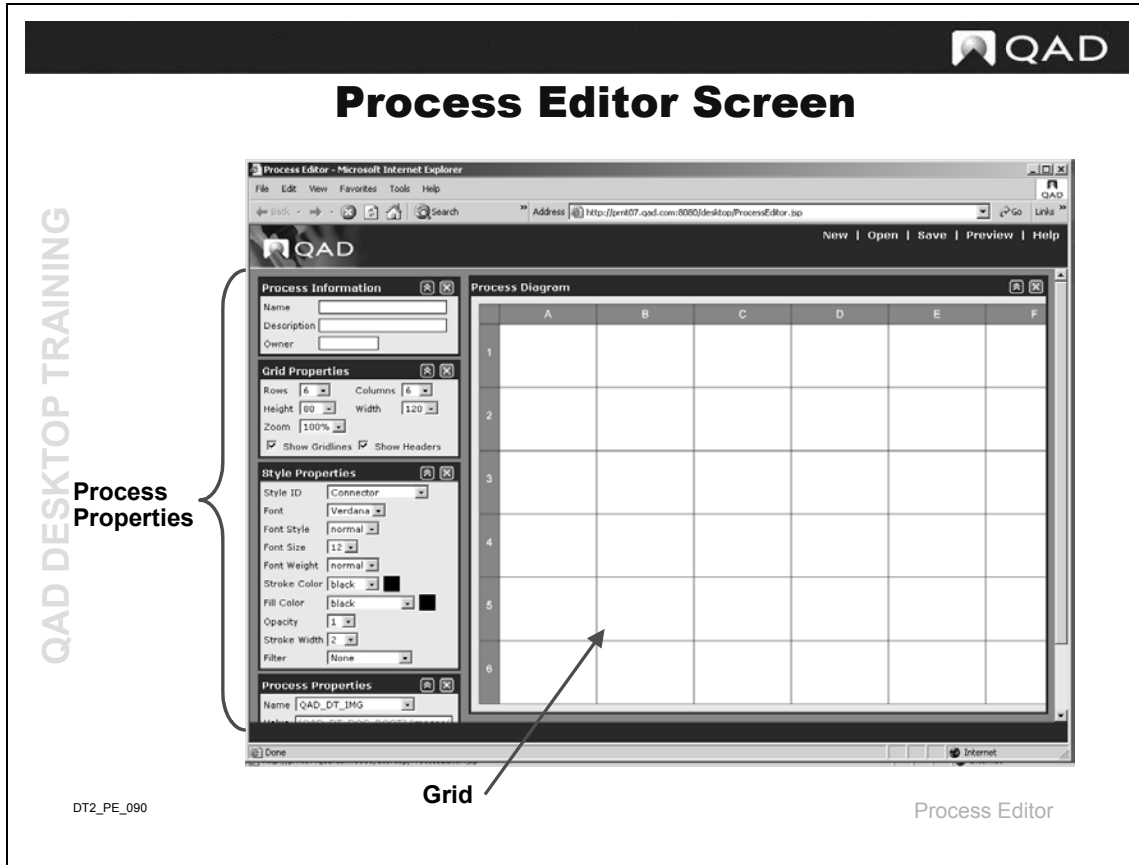
**Click on Process Editor**

QAD DESKTOP TRAINING


DT2\_PE\_080

Process Editor

### Starting Up the Process Editor



Process Editor Screen



## Process Properties

QAD DESKTOP TRAINING

### Process Properties

**Process Information**

Name:

Description:

Owner:

**Grid Properties**

Rows:  Columns:

Height:  Width:

Zoom:

Show Gridlines  Show Headers

**Style Properties**

Style ID:

Font:

Font Style:

Font Size:

Font Weight:

Stroke Color:

Fill Color:

Opacity:

Stroke Width:

Filter:

**Process Properties**

Name:

Value:

Scope:

URL Parameter

### Node Properties

**Node Properties**

Label:

URL:

Target:

Image:


Shape:

Style:

DT2\_PE\_100


Process Editor



## Process Properties



## Process Editor Functions

New | Open | Save | Preview | Help


 QAD


**Process Information**  


Name



Description

Owner

**Grid Properties**  

**Style Properties**  

**Process Properties**  

**Process Diagram**  


	A	B	C	D	E	F
1						
2						
3						

**Process Editor functions**

DT2\_PE\_110

Process Editor

## Process Editor Functions



## Create a Process

QAD DESKTOP TRAINING

**Name**

**Description**

**Owner**

**Process Information** ⌵ ⌵

Name

Description

Owner

---

**Grid Properties** ☑ ⌵

**Style Properties** ☑ ⌵

**Process Properties** ☑ ⌵


**Process Diagram**

	A	B	C
1			
2			
3			

DT2\_PE\_120

Process Editor

### Create a Process

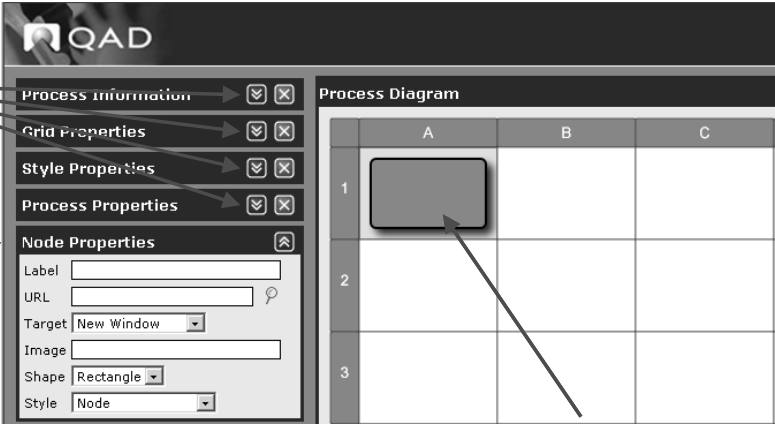


## Create a Node

**QAD DESKTOP TRAINING**

**Minimize Editor Property Boxes**


**Node Properties Box**



**Click on Grid New Node**

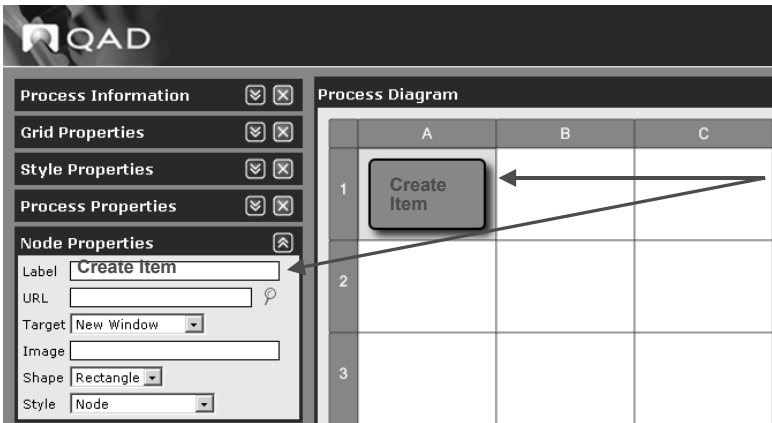
DT2\_PE\_130 Process Editor

### Create a Node



## Create a Node

QAD DESKTOP TRAINING



**Node Name**

DT2\_PE\_140
Process Editor

**Create a Node, cont.**


## Node Link – MFG/PRO

QAD DESKTOP TRAINING

Menu Number	Program	Label
101	1.22.9*	clbaiq.p
102	1.4.1	ppptmt.p
103	1.4.10	ppptiq03.p
104	1.4.11	ppptiq00.p
105	1.4.12	ppptcp.p
106	1.4.13	ppptcg.p
107	1.4.14	ppcscg.p
108	1.4.15	ppcsbtld.p
109	1.4.16	pppsmt01.p
110	1.4.17	pppsmt02.p
111	1.4.18	pppsmt03.p
112	1.4.19	ppcommt.p
113	1.4.2	ppptiq05.p
114	1.4.20	ppbdov01.p
115	1.4.21	ppbdov02.p
116	1.4.22	ppcscp01.p
117	1.4.23	ppcscp02.p
118	1.4.3	ppptmt04.p
119	1.4.4	ppptiq04.p

DT2\_PE\_150
Process Editor

### Node Link - MFG/PRO




## Node Link - URL

QAD DESKTOP TRAINING

**Node Properties**

Label

URL  

Target

Image

Shape

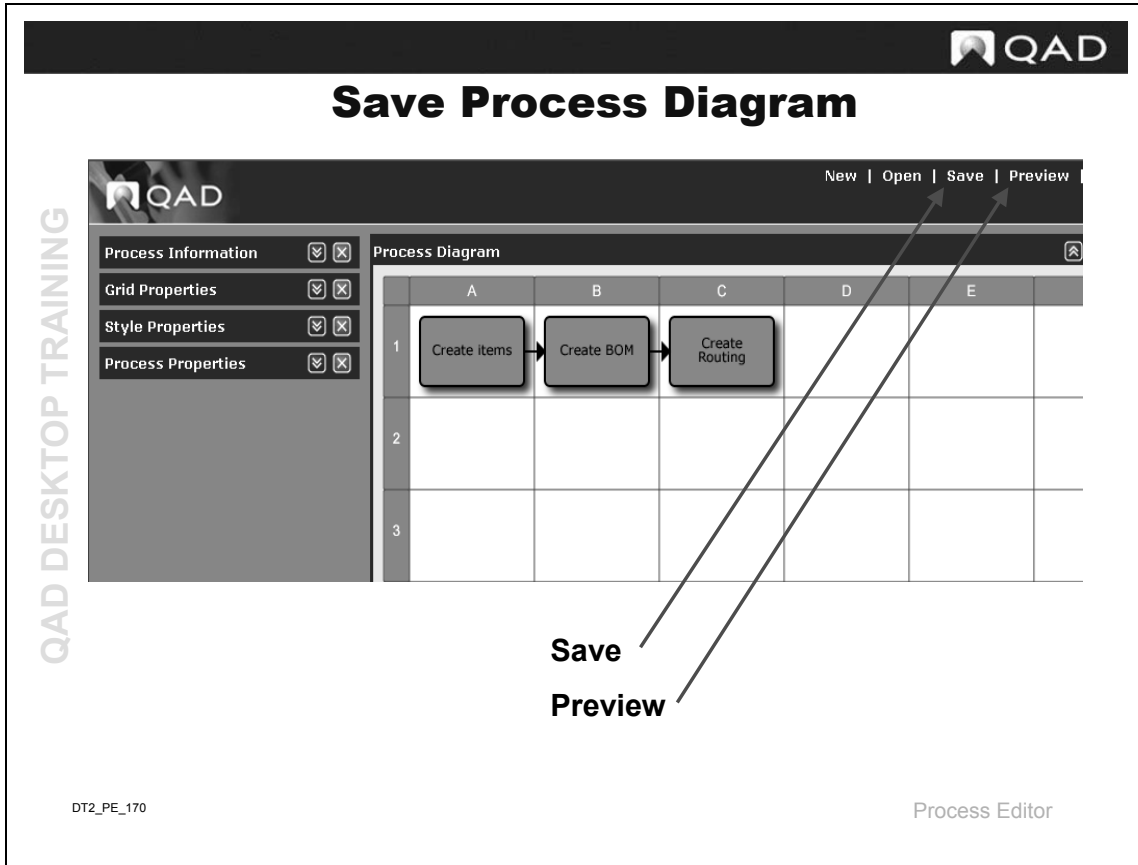
Style

**URL Address** →


DT2\_PE\_160

Process Editor

### Node Link - URL

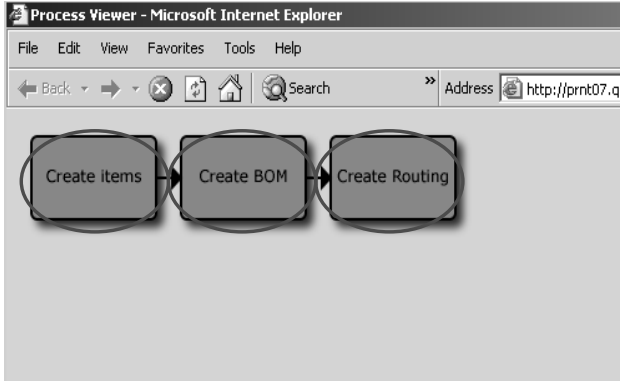


## Save Process Diagram



## Preview Process Diagram


QAD DESKTOP TRAINING



The screenshot shows a Microsoft Internet Explorer browser window titled "Process Viewer - Microsoft Internet Explorer". The address bar contains "http://prnt07.q". The main content area displays a process diagram with three sequential steps: "Create items", "Create BOM", and "Create Routing", each in a rounded rectangular box connected by arrows.

DT2\_PE\_180 Process Editor


### Preview Process Diagram



## Exercise

### Create a Process Diagram

QAD DESKTOP TRAINING



DT2\_PE\_190

Process Editor

## Exercise



## Exercise


QAD DESKTOP TRAINING

- Create a new Process
- Add a node and link with MFG/PRO program
- Add a second node and link with URL
- Connect the two nodes with an arrow.

DT2\_PE\_200

Process Editor

**Exercise, cont.**




## Add Process Diagram to Desktop

QAD DESKTOP TRAINING

- Steps to to Desktop Process Menu
  1. Update “processes.d”
  2. Update Label Master
  3. Re-Build Desktop Menus

DT2\_PE\_210 Process Editor

### Add Process Diagram to Desktop



## Update Label Master

QAD DESKTOP TRAINING

- Label Master Maintenance (36.4.17.1)
- Data required:
  - Term = term defined in “processes.d”
  - Long Label = (Label to appear on Process Menu)
- Example:
  - Term = “NewProduct”
  - Long Label = “NEW PROCESS DIAGRAM”

DT2\_PE\_230Process Editor

## Update Label Master

**QAD**

## Update Label Master

QAD DESKTOP TRAINING

**Label Master Maintenance**

Language ID:  english (U.S.)

Term: NEW\_PRODUCT

Long Label: Add A New Product

Medium Label:

Short Label:

Stacked Label:

Description:

← →


Add Link

**Record added**

DT2\_PE\_240

Process Editor

### Update Label Master, cont.



## Re-Build Desktop Menus

Setup | Configure | **Build** | Connection Manager | Process Admin | Process Editor | QAD Downloads | Launch

QAD DESKTOP TRAINING

**Build system:**

Available Systems:

MFG/PRO language code (us)

Progress path ( /dr01/dlc)

Database connection information

PROPATH

---

Options: All:

Create config.js file:

Create search database:

Default Language:

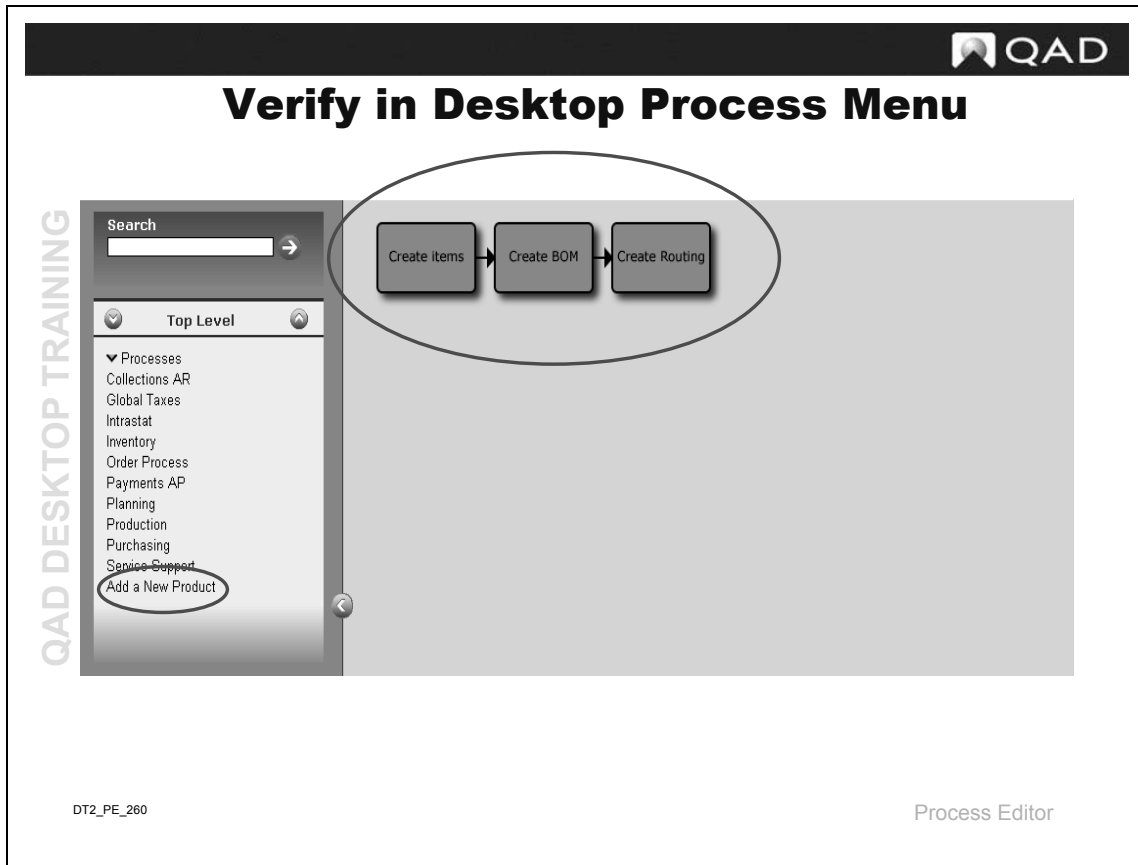
---

Load Data files:

Compile Desktop Progress files:

DT2\_PE\_260
Process Editor

## Re-Build Desktop Menus



## Verify in Desktop Process Menu



## Exercise

Add a Process Diagram to Desktop Menu

QAD DESKTOP TRAINING




DT2\_PE\_270

Process Editor

## Exercise





## Exercise

QAD DESKTOP TRAINING

- Edit “processes.d” file with your new Process diagram
- Update Label Master
- Re-Build Desktop menus
- Check your “Process” menu

DT2\_PE\_280Process Editor

**Exercise, cont.**



## Course Overview

QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ✓ Client Installation
- ✓ Processor Editor
  - ◆ Multi-Systems
  - ◆ Deployment
  - ◆ Performance and Tuning
  - ◆ Oracle Considerations
  - ◆ Troubleshooting

DT2\_PE\_290


Process Ed.





CHAPTER 10

# Multi-Systems




## Overview

QAD DESKTOP TRAINING

- Multiple DB: Independent Environment
- Multiple DB: Single Environment
- Multi-Language Environments

DT2\_MS\_010Multi-Systems

## Overview




## Multiple DB: Independent Environment

QAD DESKTOP TRAINING

- Why?
  - Production, Development, Training
  - Independent environments
- Considerations
  - Different code streams
  - Different startup parameters
  - Administration differences

DT2\_MS\_020 Multi-Systems

## Multiple Databases: Independent Environment




## Desktop Install Review List

QAD DESKTOP TRAINING

- MFG/PRO Character environment
  - Database parameters
  - Data
  - Application code
- WebSpeed
  - Broker
- Web Server
  - Scripts directory
  - Docs directory

DT2\_MS\_030 Multi-Systems

### Desktop Install Review List



## Desktop Install Review List

QAD DESKTOP TRAINING

- Tomcat
  - WebApplication
- Desktop
  - Progress Code
  - Configuration

DT2\_MS\_040 Multi-Systems

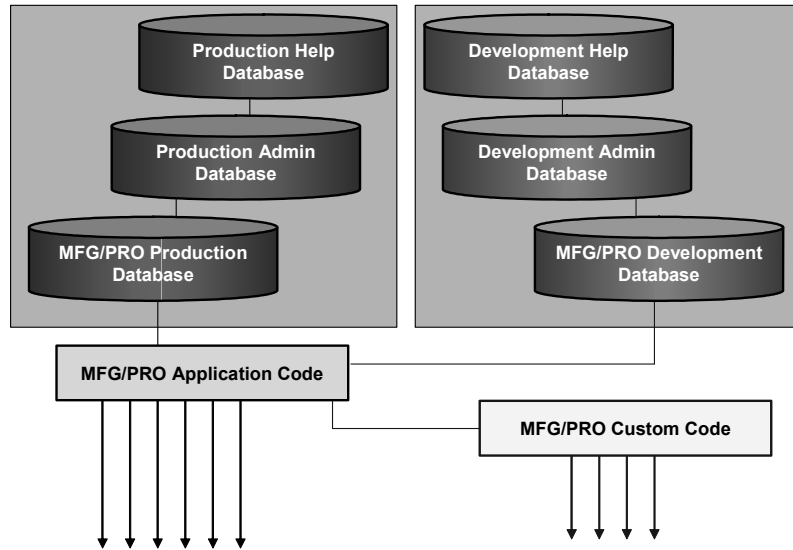
**Desktop Install Review List, cont.**



## Multiple DB Differences: Independent

Different Databases, code, data,...

QAD DESKTOP TRAINING




DT2\_MS\_050

Multi-Systems

## Multiple DB Differences: Independent



	
<b>Multiple DB Differences: Independent</b>	
Differences	What does this affect?
<ul style="list-style-type: none"> <li>• Databases               <ul style="list-style-type: none"> <li>• Names</li> <li>• Ports</li> <li>• Startup parameters</li> </ul> </li> <li>• MFG/PRO Application Code</li> <li>• Data</li> </ul>	<ul style="list-style-type: none"> <li>• Parameter file               <ul style="list-style-type: none"> <li>• Telnet file</li> <li>• Tomcat file</li> </ul> </li> <li>• Propath               <ul style="list-style-type: none"> <li>• WebSpeed broker</li> <li>• Desktop Build</li> </ul> </li> <li>• Desktop Build</li> </ul>
DT2_MS_060	Multi-Systems

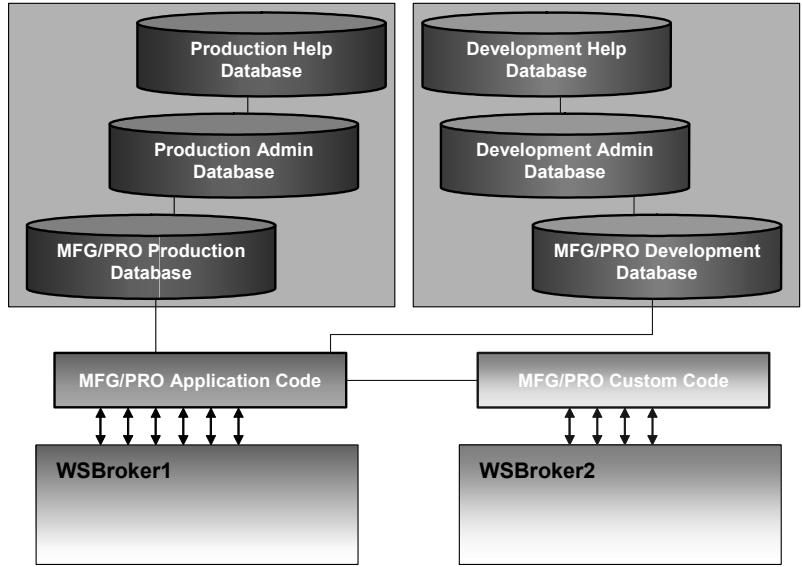
**Multiple DB Differences: Independent, cont.**



## Multiple DB – WebSpeed: Independent

Different brokers

QAD DESKTOP TRAINING




DT2\_MS\_070

Multi-Systems

## Multiple DB WebSpeed: Independent





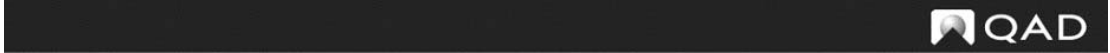
## Multiple DB – WebSpeed: Independent

<p>Differences</p> <ul style="list-style-type: none"><li>• WebSpeed Brokers<ul style="list-style-type: none"><li>• Names</li><li>• Ports</li><li>• Agents/port ranges</li></ul></li></ul>	<p>What does this affect?</p> <ul style="list-style-type: none"><li>• Desktop Configuration<ul style="list-style-type: none"><li>• “config.properties”</li><li>• “config.js”</li></ul></li></ul>
---	--

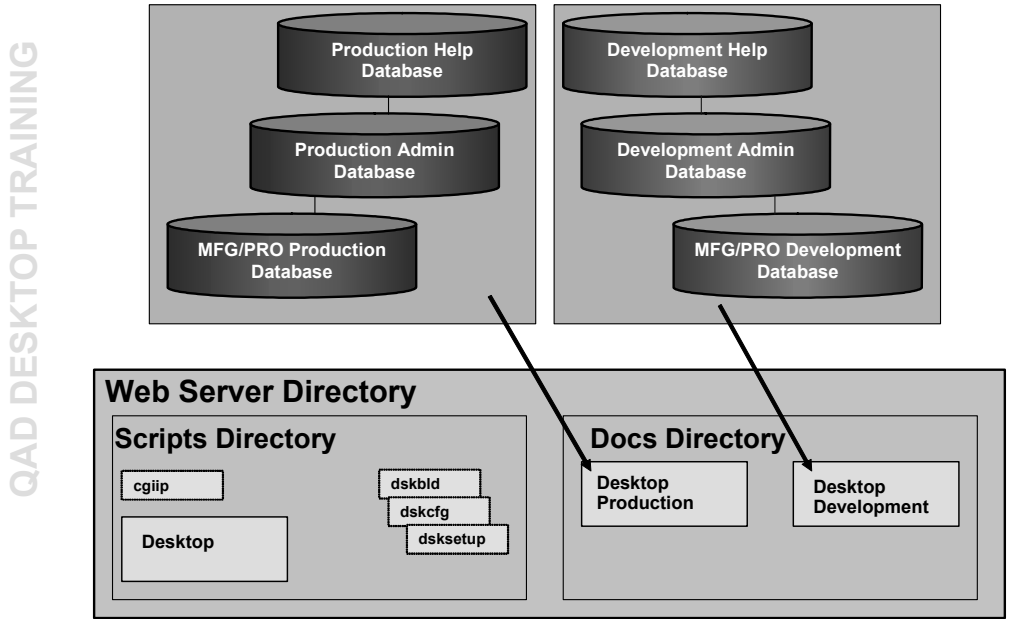
QAD DESKTOP TRAINING

DT2\_MS\_080 Multi-Systems

### Multiple DB WebSpeed: Independent, cont.



## Multiple DB - Web Server: Independent



DT2\_MS\_090

Multi-Systems

## Multiple DB Web Server: Independent



## Multiple DB - Web Server: Independent

QAD DESKTOP TRAINING

- No requirement for additional Web Server
- Uses same Desktop executables to install
- Requires a separate Desktop directory in the “docs”
  - Different menus
  - “config.js” file

DT2\_MS\_100

Multi-Systems

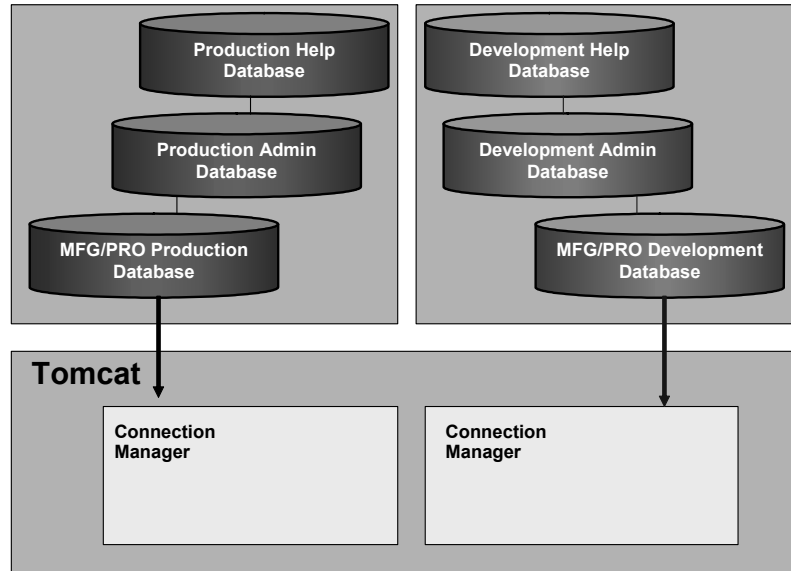
### Multiple DB Web Server: Independent, cont.





## Multiple DB – Tomcat: Independent

QAD DESKTOP TRAINING



DT2\_MS\_110

Multi-Systems

## Multiple DB Tomcat: Independent





## Multiple DB – Tomcat: Independent


QAD DESKTOP TRAINING

- No requirement for additional Tomcat servers
- Considerations for additional Tomcat servers
  - Resources (cpu, memory)
  - Administration (starting and stopping)
- Requires a separate Desktop webapp
  - Different names
  - Different telnet script files
  - “config.js” file

DT2\_MS\_120

Multi-Systems

**Multiple DB Tomcat: Independent, cont.**



## Setup Script for Multiple DB: Independent


QAD DESKTOP TRAINING

- Preparation
  - Database connection file for each database environment
- Desktop Setup
  - Each database environment gets a name
  - Tomcat WebApp name
  - Path to the appropriate MFG/PRO code

DT2\_MS\_130 Multi-Systems

### Setup Script for Multiple DB: Independent

“dsksetup” Script



## “dsksetup” Script

QAD DESKTOP TRAINING

Available Systems: US-English ▾   New System   Delete System   Save System

Tomcat location:

WebApplication Name:  ← **New WebApp**

MFG/PRO code location:  ← **DB location**


WebServer Document location:  ← **New “Docs” directory**

J2SDK location:

↙ **New System**

DT2\_MS\_140 Multi-Systems

“dsksetup” Script, cont.



## Configuration Script for Multiple DB: Independent


QAD DESKTOP TRAINING

- Desktop Configuration:
  - WebApp name
  - “Relative” path to executables directory
  - “Relative” path to Desktop Installation Directory
  - WebSpeed broker name
  - Full Path to:
    - Desktop Install Directory
    - Web Server executables directory
    - MFG/PRO Progress code

DT2\_MS\_150 Multi-Systems

## Configuration Script for Multiple DB: Independent

### “dskcfg” Script




## “dskcfg” Script

Enter values for each of the following required fields. The information in parentheses illustrates how the response is used. Enter a value that corresponds to the red text.

<p>Available Systems:</p> <p><b>Web Server URL Information</b></p> <p>Web server host name (http://servername.something.com)</p> <p>Web server port number (http://servername.something.com:80)</p> <p>WebSpeed information is the same <input checked="" type="checkbox"/></p> <ul style="list-style-type: none"> <li>• WebSpeed server host name (http://servername.something.com)</li> <li>• WebSpeed server port number (http://servername.something.com:80)</li> </ul> <p>Java Servlet (Tomcat) server host name (http://servername.something.com)</p> <p>Java Servlet (Tomcat) server port number (http://servername.something.com:8080)</p> <p>Java Servlet (Tomcat) Webapp name (http://servername.something.com:8080/desktop)</p> <p>Relative path to the executables directory (http://servername.something.com/cgi-bin)</p> <p>Relative path to the Desktop installation directory (http://servername.something.com/desktop)</p> <p>WebSpeed executable name (http://servername.something.com/cgi-bin/qmaeB_cgi.ksh #WService=netui)</p> <p>WebSpeed broker name (http://servername.something.com/cgi-bin/cgiip/WService=netui)</p> <p>Full URL to Desktop help index file (http://servername.something.com/multinet/help/doc/en/index.html)</p>	<div style="text-align: right; margin-bottom: 5px;"> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">US-English</span> </div> <div style="text-align: right; margin-bottom: 5px;"> <input type="button" value="Save"/> <input type="button" value="Clear"/> <input type="button" value="Reset"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="prsu05.qad.com"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="80"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="prsu05.qad.com"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="80"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="prsu05.qad.com"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="8080"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%; border: 1px solid black; border-radius: 50%; padding: 2px;" type="text" value="USdesktop"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%; border: 1px solid black; border-radius: 50%; padding: 2px;" type="text" value="/cgi-bin"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%; border: 1px solid black; border-radius: 50%; padding: 2px;" type="text" value="/ml"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text" value="wspd_cgi.sh"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%; border: 1px solid black; border-radius: 50%; padding: 2px;" type="text" value="USdesktop"/> </div> <div style="margin-bottom: 5px;"> <input style="width: 100%;" type="text"/> </div>
---	---

DT2\_MS\_160 Multi-Systems

“dskcfg” Script, cont.



## “dskcfg” Script

QAD DESKTOP TRAINING

**Directory Information**

Full path to Desktop install directory ( /dr01/apache/htdocs/desktop )

Full path to Web server executables directory ( /dr01/apache/cgi-bin )

Full path to MFG/PRO eB and Desktop Progress code ( /dr01/qad/mfgpro\_eb )

**Additional Settings**

Oracle Home environment variable


Oracle SID environment variable

Maximum search results (20)

Tracing (true / false)  True  False

DT2\_MS\_170 Multi-Systems

“dskcfg” Script, cont.



## Build Script for Multiple DB: Independent


QAD DESKTOP TRAINING

- Desktop Build
  - PROPATH (xrc)
  - Database connection information file
- Build Options
  - Create config.js file
  - Create search database
  - Create menu pages
  - Create labels.js file
  - Load Data files
  - Compile Desktop Progress files

DT2\_MS\_180 Multi-Systems

## Build Script for Multiple DB: Independent

### “dskbld” Script



## “dskbld” Script

**Build system:**

Available Systems: US-English

MFG/PRO language code (us) English (us)

Progress path ( /dr01/dlc) /dr01/dlc91d

Database connection information -pf /dr02/mfgpro/eB2\_ML/usdesktop.pt

PROPATH

Options: All:


Create config.js file: <input checked="" type="checkbox"/>	Create menu pages: <input checked="" type="checkbox"/>
Create search database: <input checked="" type="checkbox"/>	Create labels.js file: <input checked="" type="checkbox"/>

---

Load Data files: <input checked="" type="checkbox"/>	
Compile Desktop Progress files: <input checked="" type="checkbox"/>	

DT2\_MS\_190 Multi-Systems

“dskbld” Script, cont.



## Multiple DB: Single Environment

QAD DESKTOP TRAINING

- What do we mean?
  - Multiple databases in a single environment
  - Example: Chicago, New York, Seattle
- Considerations:
  - Same Progress code
  - Startup connection to all databases
  - Single Admin database

DT2\_MS\_200Multi-Systems

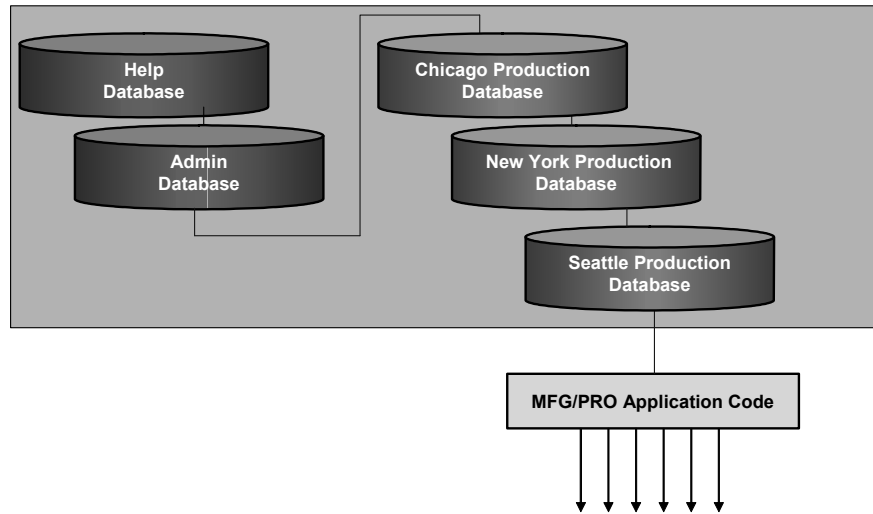
## Multiple Databases: Single Environment



## Multiple DB Differences: Single

Different Databases, code, data,...

QAD DESKTOP TRAINING




DT2\_MS\_210

Multi-Systems

## Multiple DB Differences: Single





## Setup Script for Multiple DB: Single


QAD DESKTOP TRAINING

- Preparation
  - Follow Unix install
- Desktop Setup:
  - Follow Unix install
- Desktop Configuration
  - Follow Unix install

DT2\_MS\_220 Multi-Systems

## Setup Script for Multiple DB: Single

### “dsksetup” Script



## “dsksetup” Script

QAD DESKTOP TRAINING


Available Systems:

Tomcat location:	<input type="text" value="/dr01/tom_ML"/>
WebApplication Name:	<input type="text" value="USdesktop"/>
MFG/PRO code location:	<input type="text" value="/dr02/mfgpro/eB2_ML"/>
WebServer Document location:	<input type="text" value="/usr/local/apache/ml"/>
J2SDK location:	<input type="text" value="/usr/j2sdk"/>

**Same as independent database environment**

DT2\_MS\_230 Multi-Systems

“dsksetup” Script, cont.



## “dskcfg” Script

Enter values for each of the following required fields. The information in parentheses illustrates how the response is used. Enter a value that corresponds to the red text.

QAD DESKTOP TRAINING

Available Systems: US-English ▾

**Web Server URL Information**

Web server host name (http://servername.something.com) prsu05.qad.com

Web server port number (http://servername.something.com:80) 80

WebSpeed information is the same

- WebSpeed server host name (http://servername.something.com) prsu05.qad.com
- WebSpeed server port number (http://servername.something.com:80) 80

Java Servlet (Tomcat) server host name (http://servername.something.com) prsu05.qad.com

Java Servlet (Tomcat) server port number (http://servername.something.com:8080) 8080

Java Servlet (Tomcat) Webapp name (http://servername.something.com:8080/desktop) USdesktop

Relative path to the executables directory (http://servername.something.com/cgi-bin) /cgi-bin

Relative path to the Desktop installation directory (http://servername.something.com/desktop) /ml

WebSpeed executable name (http://servername.something.com/cgi-bin/qmaeB\_cgi.ksh AWService=netui) wspd\_cgi.sh

WebSpeed broker name (http://servername.something.com/cgi-bin/cgiipAWService=netui) USdesktop


Full URL to Desktop help index file (http://servername.something.com/multinet/help/doc/en/index.html)

Same as independent database environment

DT2\_MS\_240
Multi-Systems

## Configuration Script for Multiple DB: Single

### “dskcfg” Script



## “dskcfg” Script

QAD DESKTOP TRAINING

**Directory Information**

Full path to Desktop install directory ( /dr01/apache/htdocs/desktop )	/usr/local/apache/htdocs/ml
Full path to Web server executables directory ( /dr01/apache/cgi-bin )	/usr/local/apache/cgi-bin
Full path to MFG/PRO eB and Desktop Progress code ( /dr01/qad/mfgpro_eb )	/dr02/mfgpro_eB2_ML


**Additional Settings**

Oracle Home environment variable	
Oracle SID environment variable	
Maximum search results (20)	20
Tracing (true / false)	False ▾

**Same as independent database environment**

DT2\_MS\_250
Multi-Systems

“dskcfg” Script, cont.



## Build Script for Multiple DB: Single


QAD DESKTOP TRAINING

- Desktop Build
  - Connect to one MFG/PRO database only
  - Create a parameter file for “dskbld”
- Build Options
  - Load Data files (pgmi-mstr)
  - Compile Desktop Progress files
- Tomcat
  - Telnet script for Tomcat

DT2\_MS\_260 Multi-Systems

## Build Script for Multiple DB: Single

### “dskbld” Script




## Parameter File Example

QAD DESKTOP TRAINING

```
-db ny -trig triggers -H host01 -S ny-svr -N TCP -ld newyork
-db help -trig triggers -H host01 -S help-svr -N TCP -ld qadhelp
-db adm -trig triggers -H host01 -S adm-svr -N TCP -ld qadadm
-yy 1920
```

DT2\_MS\_270 Multi-Systems

**Build Script for Multiple DB: Single, cont.**



## “dskbld” Script

QAD DESKTOP TRAINING

**Build system:**

Available Systems: US-English

MFG/PRO language code (us) English (us)

Progress path ( /dr01/dlc) /dr01/dlc91d

Database connection information -pf /dr02/mfgpro/eB2\_ML/usdesktop.pf

PROPATH

---

Options: All:

Create config.js file: <input checked="" type="checkbox"/>	Create menu pages: <input checked="" type="checkbox"/>
Create search database: <input checked="" type="checkbox"/>	Create labels.js file: <input checked="" type="checkbox"/>

---


Load Data files: <input checked="" type="checkbox"/>
Compile Desktop Progress files: <input checked="" type="checkbox"/>

Build
Clear
Reset

DT2\_MS\_280

Multi-Systems

**Build Script for Multiple DB: Single, cont.**




## Multi-Language Environment

QAD DESKTOP TRAINING

- MFG/PRO considerations
  - Codepage is set correct
  - Language code master (36.4.17.24)
- Parameter file
  - -cpinternal undefined
  - -cpstream undefined

DT2\_MS\_290 Multi-Systems

## Multi-Language Environment




## Parameter File Example

```
-cpinternal undefined -cpstream undefined
-db /dr02/mfgpro/eB2pro/db/mfgprod -ld qaddb -trig triggers
-db /dr02/mfgpro/eB2pro/db/hlpprod -ld qadhelp
-db /dr02/mfgpro/eB2pro/db/admprod -ld qadadm -trig triggers
-c 30 -d mdy -yy 1920 -Bt 350 -D 100 -mmax 3000 -nb 200 -s 63
```

QAD DESKTOP TRAINING

DT2\_MS\_300 Multi-Systems

### Parameter File Example



QAD DESKTOP TRAINING


## Build Script for Multi-Language Environments

- Build US language first
- Install 2<sup>nd</sup> language
- Double-Byte language install considerations
  - Traditional Chinese (Big-5 vs Big5)
  - Telnet Client must be setup for double-byte

DT2\_MS\_310Multi-Systems

## Build Script for Multi-Language Environments

### “dskbld” Script



## “dskbld” Script

**Build system:**

Available Systems:

MFG/PRO language code (us)

Progress path ( /dr01/dlc)

Database connection information

PROPATH

Options: All:


Create config.js file: <input checked="" type="checkbox"/>	Create menu pages: <input checked="" type="checkbox"/>
Create search database: <input checked="" type="checkbox"/>	Create labels.js file: <input checked="" type="checkbox"/>

Load Data files:

Compile Desktop Progress files:

DT2\_MS\_320 Multi-Systems

**Build Script for Multi-Language Environments, cont.**




## Course Overview

QAD DESKTOP TRAINING


- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ✓ Client Installation
- ✓ Processor Editor
- ✓ Multi-Systems
- ◆ Deployment
- ◆ Performance and Tuning
- ◆ Oracle Considerations
- ◆ Troubleshooting

DT2\_MS\_330

Multi-Systeme 

CHAPTER 11

# Performance and Tuning



## Overview

- Tomcat Considerations
- Database
- Apache
- Clients
- UNIX Tools
- Kernel Considerations

DT2\_PT\_010

Performance & Tuning

QAD DESKTOP TRAINING

## Performance and Tuning Overview



## Tomcat


QAD DESKTOP TRAINING

- Memory allocations (Java options)
  - -server
    - Tells java to run optimized for server side
  - -Xms256m
    - Sets initial heap size (this example sets it to 256Meg)
  - -Xmx256m
    - Sets max heap size (this example sets it to 256Meg)
  - Set via CATALINA\_OPTS environment variable  
export CATALINA\_OPTS="-server -Xms256m -Xmx256m"

DT2\_PT\_020

Performance & Tuning

## Tomcat



## Database

QAD DESKTOP TRAINING

- Standard Database tuning ...
- Make sure to set the “-n” parameter
  - This sets the max number of connections a database can have
  - This value should exceed:  

$\text{Max WebSpeed agents} + \text{Max tomcat agents} +$   
 $\text{Max character connect} + \text{Max telnet connects}$
- 36.20.10.3 (Telnet Maint)
  - Max value = Maximum number of telnet connections a user can have & Maximum number of active HTML maint programs a user can have
  - Min value = Number of idle telnet connections a client will have: **I RECOMMEND SETTING THIS VALUE TO “0”**

DT2\_PT\_030Performance & Tuning

## Database



## Apache

QAD DESKTOP TRAINING


- Configure compression
- mod\_gzip
  - **Apache 1.3**
  - <http://modules.apache.org/>
  - <http://httpd.apache.org/docs/mod/index.html>
- mod\_deflate
  - **Apache 2.0**
  - <http://httpd.apache.org/docs-2.0/mod/>

DT2\_PT\_040

Performance & Tuning

## Apache






## Clients

QAD DESKTOP TRAINING

- HTML Rendering is CPU intensive
- A P400 PC will see its processor peg 100% with each page rendering
- Recommend at least a P600
- Recommend double the OS required memory

DT2\_PT\_050Performance & Tuning

## Clients



## UNIX Tools

- top


```

root@coli22:/dr01/mfgpro/tomcat-8080/bin
12:35pm up 75 days, 21:52, 45 users, load average: 1.99, 1.91, 1.71
794 processes: 792 sleeping, 2 running, 0 zombie, 0 stopped
CPU0 states: 7.2% user, 48.1% system, 0.0% nice, 43.1% idle
CPU1 states: 9.1% user, 32.0% system, 0.0% nice, 58.0% idle
Mem: 1028368K av, 1023272K used, 5096K free, 14120K shrd, 3752K buff
Swap: 2048248K av, 384116K used, 1664132K free 140584K cached
            
```

PID	USER	PRI	NI	SIZE	RSS	SHARE	STAT	%CPU	%MEM	TIME	COMMAND
9815	root	17	0	1944	1940	956	R	60.5	0.1	0:03	top
10642	nobody	11	0	26992	25M	496	S	12.4	2.5	450:01	smbd
26579	root	9	0	10856	10M	1844	D	10.1	1.0	62:48	smbd
31110	root	9	0	14364	4932	1572	S	3.5	0.4	13:16	java
1807	root	9	0	10628	8756	7756	S	1.5	0.8	5:36	_progres
26740	root	10	0	202M	139M	60032	S	1.5	13.8	0:37	java
3175	named	9	0	44212	40M	36888	S	0.7	4.0	98:38	named
22803	nobody	9	0	27256	26M	2728	S	0.7	2.6	30:27	smbd
9812	root	9	0	2056	2056	1476	S	0.3	0.1	0:00	vim
1	root	8	0	120	72	72	S	0.0	0.0	0:08	init
2	root	9	0	0	0	0	SW	0.0	0.0	0:00	keventd
3	root	19	19	0	0	0	SWN	0.0	0.0	0:05	ksoftirqd_CPU0
4	root	19	19	0	0	0	SWN	0.0	0.0	0:06	ksoftirqd_CPU1
5	root	9	0	0	0	0	SW	0.0	0.0	18:44	kswapd
6	root	9	0	0	0	0	SW	0.0	0.0	5:30	kreclaimd
7	root	9	0	0	0	0	SW	0.0	0.0	0:51	bdflush

DT2\_PT\_060
Performance & Tuning

## UNIX Tools



## UNIX Tools (continued)

- Better than top is “free”

QAD DESKTOP TRAINING

```
root@coli22:/dr01/mfgpro/tomcat-8080/bin
[root@coli22 bin]# free
              total        used         free       shared    buffers     cached
Mem:      1028368      1023284          5084         14120         2520      133088
-/+ buffers/cache:      887676      140692
Swap:      2048248       384116      1664132
```

DT2\_PT\_070 Performance & Tuning

### UNIX Tools, cont.



## UNIX Tools (continued)

QAD DESKTOP TRAINING


- lsof
  - Lists open files on system
  - A way of tracking down process associated with a Port
  - Example: `lsof | grep ":8080"`
- ipcs
  - Provides information on ipc facilities
- who
  - Shows who is logged into system
- ps -elf
  - Shows active processes
  - Will want to redirect to file for viewing
  - Will want to pipe it to a grep command for filtering

DT2\_PT\_080

Performance & Tuning

### UNIX Tools, cont.





## Kernel Considerations

- Max number of open files
- Max number of telnet connections
- Terminal type
- Java threading


QAD DESKTOP TRAINING

DT2\_PT\_090 Performance & Tuning

## Kernel Considerations








## Terminal Type

QAD DESKTOP TRAINING

- Unix server must NOT attempt to guess the display of the client
  - HP will set it to hp-term (which will break HTML Maint)
  - Make sure it stays at vt220

DT2\_PT\_120Performance & Tuning


## Terminal Type



## Course Overview


QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ✓ Client Installation
- ✓ Processor Editor
- ✓ Multi-Systems
- ✓ Deployment
- ✓ Performance and Tuning
- ♦ Oracle Considerations
- ♦ Troubleshooting

DT2\_PT\_130Performance & Tuning 

CHAPTER 12

# Oracle Considerations



## Oracle Considerations

QAD DESKTOP TRAINING

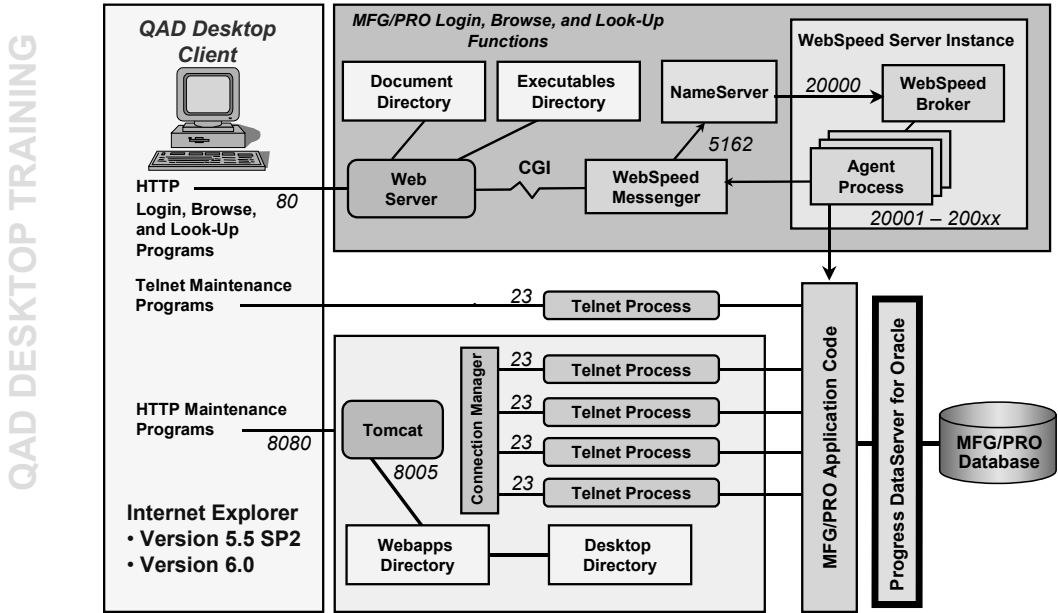
- MFG/PRO on Oracle
- Single Tier Install
- Multi Tier Install

DT2\_OC\_010 Oracle Considerations

## Oracle Considerations Overview




## QAD Desktop Components



DT2\_OC\_020 Values indicate assigned port numbers

Oracle Considerations

## QAD Desktop Components



## MFG/PRO on Oracle

QAD DESKTOP TRAINING

- Environment Variables
  - ORACLE\_HOME
  - ORACLE\_SID
- Progress 9.1D
  - Version 9.1D0101 or 9.1D02+
  - Dataserver - Linux is not yet supported
- Parameter file
  - Connection to Dataserver
  - Connection to Oracle database  
(Userid and Password)

DT2\_OC\_030Oracle Considerations

## MFG/PRO on Oracle



## Single Tier Install

QAD DESKTOP TRAINING


- Pre-requisites
- Preparation for Desktop Install
- Parameter Files
- Media Install
- Setup Script
- Configuration Script
- Build Script
- WebSpeed
- Tomcat

DT2\_OC\_040

Oracle Considerations

## Single Tier Install





## Install Pre-Requisites

QAD DESKTOP TRAINING

- Web Server
  - Scripts Directory
  - Docs Directory
- Character client
  - eB (+ current SP) or
  - eB2 (+ current SP)
- Java
  - J2SDK 1.4 or J2SEE (server)
  - JRE 1.3.1\_03+ (client)

DT2\_OC\_050 Oracle Considerations

## Install Pre-Requisites



## Desktop 2 Installation

QAD DESKTOP TRAINING


- Install Media
- Setup Script
- Configuration Script
- Build Script
- Start Tomcat
- Configure Connection Manager

DT2\_OC\_060

Oracle Considerations

### Desktop 2 Installation





## “dsksetup” Script

QAD DESKTOP TRAINING

Available Systems:

Tomcat location:

WebApplication Name:


MFG/PRO code location:

WebServer Document location:

J2SDK location:

DT2\_OC\_070 Oracle Considerations

### dsksetup Script



## “dskcfg” Script

Enter values for each of the following required fields. The information in parentheses illustrates how the response is used. Enter a value that corresponds to the red text.

QAD DESKTOP TRAINING

Available Systems: US-English ▾

**Web Server URL Information**

Web server host name (http://servername.something.com) prsu05.qad.com

Web server port number (http://servername.something.com:80) 80

WebSpeed information is the same

- WebSpeed server host name (http://servername.something.com) prsu05.qad.com
- WebSpeed server port number (http://servername.something.com:80) 80

Java Servlet (Tomcat) server host name (http://servername.something.com) prsu05.qad.com

Java Servlet (Tomcat) server port number (http://servername.something.com:8080) 8080

Java Servlet (Tomcat) Webapp name (http://servername.something.com:8080/desktop) USdesktop

Relative path to the executables directory (http://servername.something.com/cgi-bin) /cgi-bin

Relative path to the Desktop installation directory (http://servername.something.com/desktop) /ml

WebSpeed executable name (http://servername.something.com/cgi-bin/qmaeB\_cgi.ksh /WService=netui) wspd\_cgi.sh

WebSpeed broker name (http://servername.something.com/cgi-bin/cgiip/WService=netui) USdesktop

Full URL to Desktop help index file (http://servername.something.com/multinet/help/doc/en/index.html )

Oracle Considerations

## dskcfg Script



## “dskcfg” Script

QAD DESKTOP TRAINING

**Directory Information**

Full path to Desktop install directory ( /dr01/apache/htdocs/desktop )	/usr/local/apache/htdocs/ml
Full path to Web server executables directory ( /dr01/apache/cgi-bin )	/usr/local/apache/cgi-bin
Full path to MFG/PRO eB and Desktop Progress code ( /dr01/qad/mfgpro_eb )	/dr02/mfgpro/eB2_ML

**Additional Settings**

Oracle Home environment variable	/dr01/ora817
Oracle SID environment variable	oradt2
Maximum search results (20)	20
Tracing (true / false)	False

DT2\_OC\_090
Oracle Considerations

**dskcfg Script, cont.**



## “config.properties”

QAD DESKTOP TRAINING

**“config.properties” in “/dr02/mfgpro/eB2\_ML/com/qad/nav/conf” was created**

[Launch build screen](#)

### What was written

```
# QAD Desktop configuration properties
# Tue Sep 10 15:35:09 2002


archive = "multinet.jar"
cgi_dir = "/usr/local/apache/cgi-bin"
cgi_root = "/cgi-bin"
help_url = ""
trace_all = "false"
web_dir = "/usr/local/apache/htdocs/ml"
web_host = "prsu05.qad.com"
web_port = "80"
web_root = "/ml"
ws_path = "/cgi-bin/wspd.cgi.sh?Service=USdesktop"
ws_host = "prsu05.qad.com"
ws_port = "80"
mfgpro_version = "eB"
search_exe = "search"
warning_check = ""
servlet_enabled = "true"
servlet_root = "http://prsu05.qad.com:8080/USdesktop"
servlet_dir = "/dr01/tom_ML/webapps/USdesktop"
domain = ""
tomcat_host = "prsu05.qad.com"
tomcat_port = "8080"
tomcat_webapp = "USdesktop"
systemName = "US-English"
```

DT2\_OC\_100

Oracle Considerations

## config.properties





## “dskbld”

**Build system:**

Available Systems:

MFG/PRO language code (us)

Progress path ( /dr01/dlc)

Database connection information

PROPATH

Options: All:


Create config.js file:	<input checked="" type="checkbox"/>	Create menu pages:	<input checked="" type="checkbox"/>
Create search database:	<input checked="" type="checkbox"/>	Create labels.js file:	<input checked="" type="checkbox"/>

Load Data files:

Compile Desktop Progress files:

DT2\_OC\_110 Oracle Considerations

**dskbld**



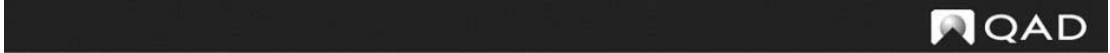
## WebSpeed

QAD DESKTOP TRAINING

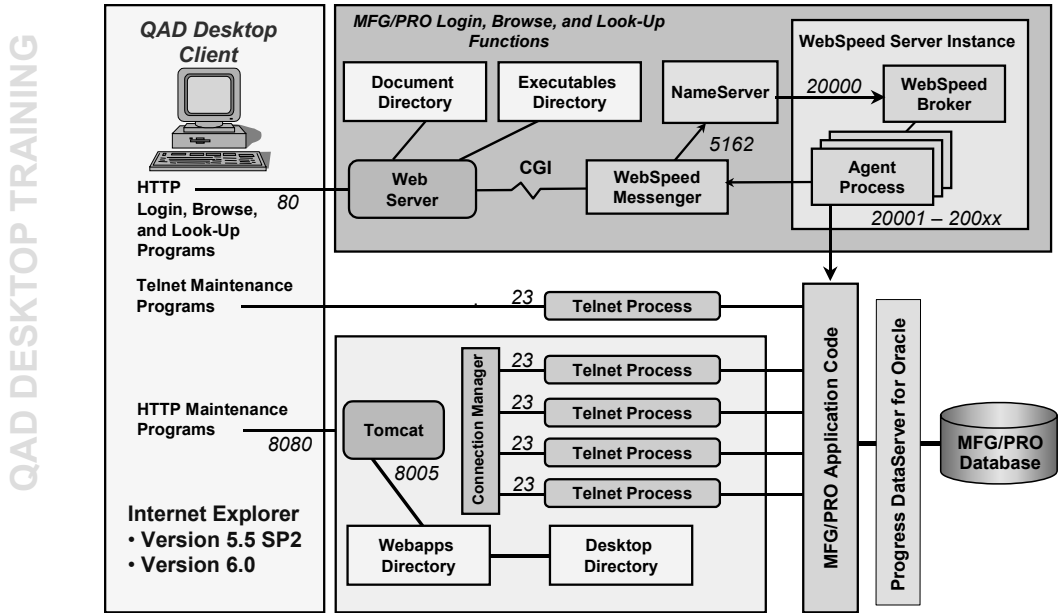
1. ORACLE\_HOME
2. ORACLE\_SID
3. Parameter File

DT2\_OC\_120Oracle Considerations

## WebSpeed



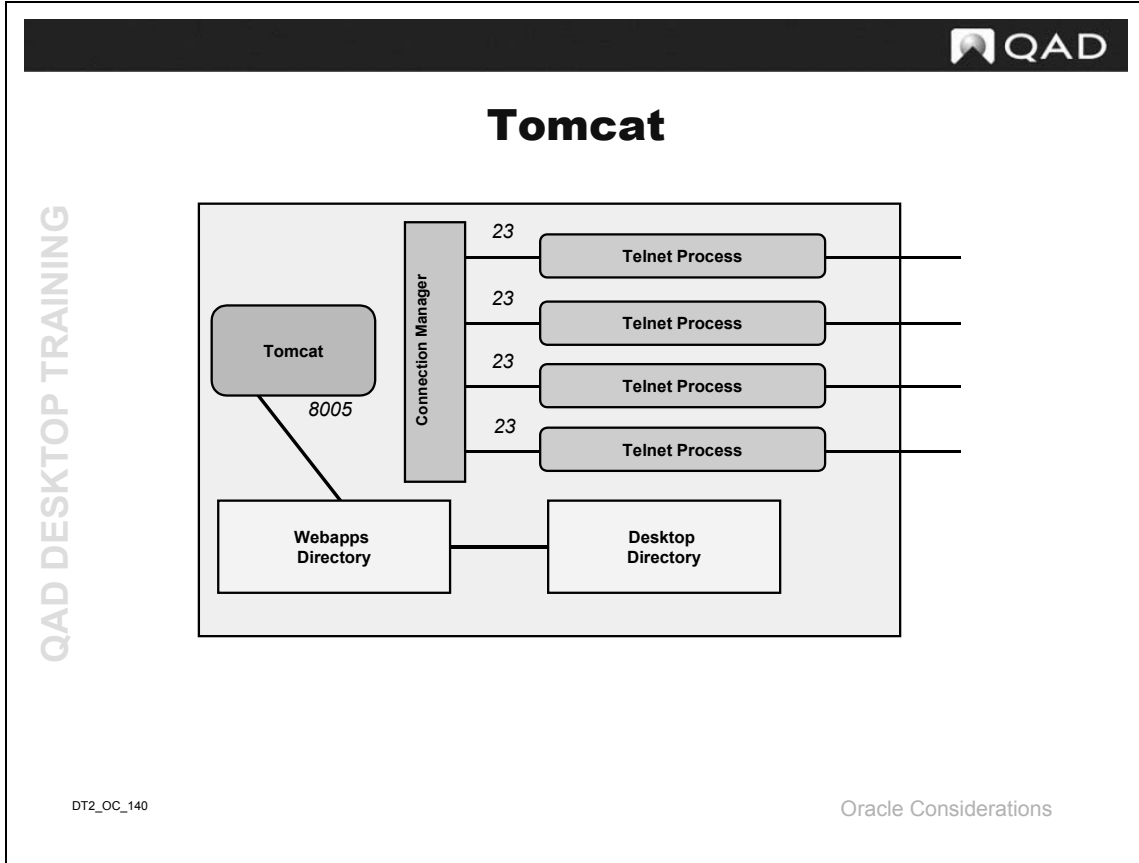
## QAD Desktop Components




DT2\_OC\_130 Values indicate assigned port numbers

Oracle Considerations

## QAD Desktop Components



## Tomcat



## Tomcat / Telnet


Nothing New for Tomcat

Nothing New for Telnet

QAD DESKTOP TRAINING

DT2\_OC\_150Oracle Considerations

## Tomcat / Telnet




## Multi-Tier

QAD DESKTOP TRAINING

- Client/Server
  - “tnsnames.ora”
  - “listener.ora”
- Progress Dataserver Platforms
  - See Progress for support and patches
- N-Tier
  - Discussions with QAD

DT2\_OC\_160Oracle Considerations


## Multi-Tier Installation



## Course Overview


QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ✓ Client Installation
- ✓ Processor Editor
- ✓ Multi-Systems
- ✓ Deployment
- ✓ Performance and Tuning
- ✓ Oracle Considerations
- ◆ Troubleshooting

DT2\_OC\_170 Oracle Considerations 

CHAPTER 13

# Troubleshooting




## Troubleshooting

QAD DESKTOP TRAINING

- Troubleshooting Basics
- Startup Sequence
- Test Points
- Logs
- Some Tools
- Troubleshooting Labs

DT2\_TS\_010 Troubleshooting

## Troubleshooting Overview




## Troubleshooting Basics

QAD DESKTOP TRAINING

- Everyone will develop their own trouble shooting technique
- QAD Desktop 2 is not a diagnostic tool, it is an application. However:
  - It can be used to gather important troubleshooting indications
    - Can you log on?
    - Can you run browses?
    - Can you run HTTP Maintenance programs?
    - Can you run Telnet Maintenance programs?
    - Do the URL links and My Desktop functions work?
    - Are the screens correctly rendered?
  - Does the program run in from a character client?
- Develop a list of test points

DT2\_TS\_020Troubleshooting

## Troubleshooting Basics




## Desktop 2 Startup Sequence

QAD DESKTOP TRAINING

- The startup sequence is important to a point
  - 1) **The database servers must be started before the other Desktop components**
  - 2) Admin Server and Name Server
  - 3) WebSpeed Brokers are next
    - Will require restart if the databases are bounced
  - 4) Tomcat
  - 5) Connection Manager
    - Will also require restart if the databases are bounced
- The Web Server can be started anytime prior to use

DT2\_TS\_030Troubleshooting

## Startup Sequence




## Troubleshooting Test Points

QAD DESKTOP TRAINING

- Possible test points
  - Databases
  - Admin Sever – Name Server
  - WebSpeed brokers, agents, and messengers
  - Web Server
  - Tomcat Server
  - Connection Manager
  - Correct operation of both telnet scripts
    - Telnet Maintenance
    - HTTP Maintenance – is the mfgwrapper set right?
  - Then – what does the Client do or not do
    - Login?
    - Run browses?
    - Run HTTP Maintenance?
    - Run Telnet Maintenance
    - Are the screens rendered correctly?

DT2\_TS\_040Troubleshooting

## Test Points



## Database Connections

QAD DESKTOP TRAINING

- Are all the necessary databases running?
- Are there a reasonable number of database connection?
  - Use a sanity check to account for the number of database connections
    - Connections for the WebSpeed brokers
    - Connections for each Connection Manager instance
    - Connections for cached Telnet Maintenance
    - Connections for any character users
    - Connections for batch processes
  - Have the databases been bounced?

DT2\_TS\_050Troubleshooting

## Database Connections



# Check the Databases

QAD DESKTOP TRAINING

- Use PROMON
  - How many users are logged on?
  - Does the number match the configuration?
  - Does the -n accommodate enough logins on all of the databases?
  - Are there users from all WebSpeed Brokers?

```

Rec Lock Waits    0 %   BI Buf Waits    0 %   AI Buf Waits
Writes by APW    0 %   Writes by BIW   0 %   Writes by AIW
Buffer Hits      99 %
DB Size          158 MB
FR chain         0 blocks
Shared Memory    8960 K
  
```

```

0 Servers, 17 Users (17 Lo
RETURN - repeat, U - conti
  
```

```


Enter your selection: 8
usr  pid  time of login  user id  tty Limbo?
6    386  Mon Sep 16 14:27:03 2002 dtremote /dev/pts/12
7    4285 Fri Sep 13 08:40:28 2002 root     batch
8    388  Mon Sep 16 14:27:03 2002 dtremote /dev/pts/15
9    387  Mon Sep 16 14:27:03 2002 dtremote /dev/pts/13
10   389  Mon Sep 16 14:27:03 2002 dtremote /dev/pts/14
11   4390 Fri Sep 13 08:41:18 2002 root     batch
12   394  Mon Sep 16 14:27:04 2002 dtremote /dev/pts/16
13   436  Mon Sep 16 14:27:14 2002 dtremote /dev/pts/17
15   4593 Fri Sep 13 08:44:34 2002 dt2      /dev/pts/3
16   4592 Fri Sep 13 08:44:34 2002 dt2      /dev/pts/2
17   4857 Fri Sep 13 08:45:34 2002 dt2      /dev/pts/6
18   4879 Fri Sep 13 08:45:34 2002 dt2      /dev/pts/5
19   4878 Fri Sep 13 08:45:34 2002 dt2      /dev/pts/9
20   4882 Fri Sep 13 08:45:35 2002 dt2      /dev/pts/7
  
```

DT2\_TS\_060

Troubleshooting

## Check the Databases





## Test the Admin and Name Servers

- Test the Admin Server  
**proadsv -query**

```
(root) /apps/progress/91d/bin $ proadsv -query
PROGRESS Version 9.1D as of Wed May 8 16:47:54 EDT 2002
AdminServer is alive. (8545)
(root) /apps/progress/91d/bin $
```

- Test the Name Server  
**nsman -name NS1 -query**

```
(root) /apps/progress/91d/bin $ nsman -name NS1 -query
PROGRESS Version 9.1D as of Wed May 8 16:47:54 EDT 2002

Connecting to Progress AdminServer using rmi://localhost:20931/Chimera (8280)
Searching for NS1 (8288)
Connecting to NS1 (8276)

NameServer NS1 running on Host plli01.qad.com Port 5162 Timeout 30 seconds.
Application Service
```

DT2\_TS\_070
Troubleshooting

## Test the Admin and Name Servers



# Test the WebSpeed Broker(s)

QAD DESKTOP TRAINING

- Test the Broker and Agents  
**wtbman -name wsdesk -query**

```

Connecting to Progress AdminServer using rmi://localhost:20931/Chimera
Searching for wsdesk (8288)
Connecting to wsdesk (8276)

Broker Name           : wsdesk
Operating Mode        : Stateless
Broker Status         : ACTIVE
Broker Port           : 20000
Broker PID            : 4251
Active Agents         : 1
Busy Agents           : 0
Locked Agents         : 0
Available Agents      : 1
Active Clients (now, peak) : (0, 1)
Client Queue Depth (cur, max) : (0, 0)
Total Requests        : 22
Rq Wait (max, avg)    : (1 ms, 0 ms)
Rq Duration (max, avg) : (360 ms, 32 ms)

PID  State      Port  nRq   nRcvd  nSent  Started      Last Change
04285 AVAILABLE 20012 000006 000006 000006 Sep 13, 2002 08:40 Sep 13, 2002

```

DT2\_TS\_080

Troubleshooting

## Test the WebSpeed Broker(s)






## Test the Web Server

- Determine if the Web Server is running

Address 

Links  Customize Links  Free AOL & Unlimited Internet  Free Hotmail  RealOne Player  Windows Media


### Index of /

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>	05-Aug-2002 14:25	-	
 <a href="#">desktop/</a>	22-Aug-2002 15:44	-	

Apache/1.3.23 Server at plli01.qad.com Port 80


DT2\_TS\_090
Troubleshooting

## Test the Web Server



## Test the WebSpeed Messenger

- A simple test of WebSpeed will tell you a lot

Address  [http://plli01/cgi-bin/wspd\\_cgi.sh/WService=wskdesk/ping](http://plli01/cgi-bin/wspd_cgi.sh/WService=wskdesk/ping)

**Web Object Path (PROPATH):**

- /apps/mfgpro/eb2/desktop
- /apps/mfgpro.eb2
- /apps/mfgpro/eb2/bbi
- /apps/progress/91d/tty
- /apps/progress/91d/tty/adecomm.pl
- /aps/progress/91d/tty/adeshar.pl
- /apps/progress/91d/tty/product.pl
- /apps/progress/91d/tty/adeedit.pl
- /apps/progress/91d/tty/adecomp.pl
- /apps/progress/91d/tty/as4dict.pl
- /apps/progress/91d
- apps/progress/91d/bin


**Connected Databases:**

- qaddb (PROGRESS)
- qadhelp (PROGRESS)
- qadadm (PROGRESS)

- Does the broker respond?
- Is the PROPATH correct?
- Are the correct databases connected?
- Ping each service that you are supporting

DT2\_TS\_100
Troubleshooting

## Test the WebSpeed Messenger



## Verify Tomcat is Running

- Enter the URL for each Tomcat instance

Address  `http://plli01.qad.com:8080/index.html`



Tomcat  
Version 4.0.3



**The Jakarta Project**  
<http://jakarta.apache.org>

Address  `http://plnt07:8080/index.html`



Tomcat  
Version 4.0.3



**The Jakarta Project**  
<http://jakarta.apache.org>


DT2\_TS\_110

Troubleshooting

QAD DESKTOP TRAINING


### Verify Tomcat is Running

QAD DESKTOP TRAINING



## Test the Tomcat Web App

- Enter the URL for the Connection Manager

**Address**  `http://plli01:8080/desktop/ConnectionManager.html`

**Enter Network Password** [?] [X]

Please type your user name and password.


Site: plli01

Realm: eB Desktop Manager Application

User Name:

Password:


Save this password in your password list



**Connection Manager**


DT2\_TS\_120 Troubleshooting

### Test the Tomcat Web App



## Look at Connection Manager

- Is the Connection Manager functioning?

Address  <http://plli01.qad.com/desktop/admin.html>

Alternate access method

Setup
|
Configure
|
Build
|
Connection Manager
|
Process Admin
|
Process Editor
|
QAD Downloads
|
Launch

Status	ID	Process ID	User ID	User IP	Max Connections	Program	User Connected Time	Close
Idle	10	0	null	null	0	null		Close
Idle	15	0	null	null	0	null		Close
Idle	13	0	null	null	0	null		Close
Idle	12	0	null	null	0	null		Close
Idle	11	0	null	null	0	null		Close
Idle	14	0	null	null	0	null		Close
Idle	16	0	null	null	0	null		Close
Idle	5	4593	null	null	0	null		Close
Idle	2	4592	null	null	0	null		Close
Total	9							Close All

DT2\_TS\_130

Refresh

Troubleshooting

## Look at Connection Manager



## Other Troubleshooting Aids

- Use the **who** command to differentiate users


```
root pts/0 Sep 13 08:25 (:0)
root pts/1 Sep 13 08:29 (:0)
dt2 pts/7 Sep 13 08:45 (p1li01)
dt2 pts/9 Sep 13 08:45 (p1li01)
dt2 pts/8 Sep 13 08:45 (p1li01)
dt2 pts/10 Sep 13 08:45 (p1li01)
mfg pts/11 Sep 17 10:58 (167.3.25.15)
dtremote pts/12 Sep 16 14:27 (p1nt07)
dtremote pts/13 Sep 16 14:27 (p1nt07)
dtremote pts/14 Sep 16 14:27 (p1nt07)
dtremote pts/15 Sep 16 14:27 (p1nt07)
dtremote pts/16 Sep 16 14:27 (p1nt07)
dtremote pts/17 Sep 16 14:27 (p1nt07)
dttelnet pts/18 Sep 17 10:59 (167.3.25.15)
dttelnet pts/19 Sep 17 10:59 (167.3.25.15)
```

QAD DESKTOP TRAINING

DT2\_TS\_140

Troubleshooting

## Other Troubleshooting Aids



## Other Troubleshooting Aids (cont'd)

- Use the ***tail*** command to view active logs  
`tail -f catalina.out`

```
StateName: Idle
connectionID: 2
ID: null
RequestID: null
SessionID: null
ProcessSeqID:
UserIP: null
UserID: null
program: null
UserMaxSessions: 0
PID: 4592
SessionStart:
AgentStart: Fri Sep 13 08:44:32 PDT 2002
LastAccessedTime: Fri Sep 13 09:31:04 PDT 2002

Init:
Initializing
timing:,,,1032362612673,Connection Mgr Monitor end,1
```

DT2\_TS\_150 Troubleshooting

### Other Troubleshooting Aids, cont.



## Other Troubleshooting Aids (cont'd)


QAD DESKTOP TRAINING

- Some important logs
  - WebSpeed broker logs
  - Database logs
  - Tomcat's catalina.out
  - HTTP Server logs
  - Client Java Console log

DT2\_TS\_160

Troubleshooting

### Other Troubleshooting Aids, cont.



## Other Troubleshooting Aids (cont'd)

QAD DESKTOP TRAINING


- Some additional informational commands
  - TOP – VSAR – GLANCE – VMSTAT
  - Windows Task Manager
  - GSW Admin Monitor
  - ps -ef or ps -elf
  - wtbman –name [broker] –query
  - nsman –name NS1 -query
  - WebSpeed Messenger Admin Utility - ping
  - Connection Manager status
  - ?

DT2\_TS\_170Troubleshooting

**Other Troubleshooting Aids, cont.**

**Exercise**

QAD DESKTOP TRAINING




DT2\_TS\_175

Troubleshooting

The illustration shows a black silhouette of a person sitting on an office chair at a desk. They are facing a computer monitor on the desk, which displays several horizontal lines representing text. A keyboard is positioned in front of the monitor. The person's hands are on the keyboard. The entire scene is set against a light gray background with a subtle shadow under the desk and chair.

**Exercise**



## Troubleshooting Lab

QAD DESKTOP TRAINING

- **Bad news** – All of your users report they can't get into their QAD Desktop systems
  - Use your bag of tricks to determine and correct the cause of their problems
  - Be sure to test all functionality of Desktop before giving them the go-ahead
- **As always happens**, they have a few more complaints, even after your heroic efforts to get the system up and running

DT2\_TS\_180Troubleshooting

## Troubleshooting Lab



## Course Overview

QAD DESKTOP TRAINING

- ✓ Overview
- ✓ Web Components
- ✓ Desktop Components
- ✓ System Requirements
- ✓ UNIX Considerations
- ✓ NT Considerations
- ✓ URL Links
- ✓ Client Installation
- ✓ Processor Editor
- ✓ Multi-Systems
- ✓ Deployment
- ✓ Performance and Tuning
- ✓ Oracle Considerations
- ✓ Troubleshooting

DT2\_TS\_190

Troubleshoot



