

# Oracle<sup>®</sup> Universal Work Queue

Implementation Guide

Release 11*i*

November 2000

Part No. A86116-02

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**Oracle Universal Work Queue Implementation Guide, Release 11*i***

**Part No. A86116-02**

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# Preface

Welcome to the Oracle Customer Relationship Management, Release 11*i*, suite of applications.

This Implementation Guide provides general descriptions of the setup and configuration tasks required to implement Oracle Universal Work Queue successfully.

This preface explains how this Implementation Guide is organized and introduces other sources of information that can help you.

## Intended Audience

This guide is aimed at anyone who is tasked with implementing Oracle Universal Work Queue, including:

- Database Administrators
- System Administrators
- Technical Specialists

This guide assumes you have the following prerequisites:

1. Understanding of computer-telephony integration (CTI)
2. Understanding of call center technology
3. Understanding of the company business processes
4. Understanding of Oracle Applications, Release 11*i*
5. Understanding of Oracle Workflow

## Structure

This manual contains the following sections:

- Considerations for Planning an Implementation Project
- Typical Release Dependencies
- Related Documentation and Resources
- Setting Up Oracle Universal Work Queue
- Installing Oracle Universal Work Queue Server
- Configuring Universal Work Queue Server
- Starting Universal Work Queue Server
- Creating an Oracle Universal Work Queue User
- Configuring Universal Work Queue Media Screen Pops
- Troubleshooting Universal Work Queue
- Oracle Universal Work Queue User Profile Options
- Configuring and Testing Integration Points
- Workflows in Oracle Universal Work Queue
- Converting and Inputting Existing Data
- Considerations for Future Upgrade Paths
- Glossary

## Related Documents

For more information, see the following manuals:

- *Installing Oracle Applications, Release 11i*
- *Oracle Applications System Administrator's Guide*
- *Supplemental CRM Installation Steps*
- *Oracle Call Center Applications Setup Guide*
- *Oracle Universal Work Queue Concepts and Procedures*
- *Oracle Telephony Manager Concepts and Procedures*
- *Oracle Telephony Manager Implementation Guide*

- *Oracle eMail Center Concepts and Procedures*
- *Oracle eMail Center Implementation Guide*



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# Implementing Oracle Universal Work Queue

This guide provides general descriptions of the setup and configuration tasks required to implement Oracle Universal Work Queue successfully. It includes an overview with list of steps to follow to set up Oracle Universal Work Queue, and includes detailed instructions on completing setup tasks.

This guide contains the following information:

- [Setting Up Oracle Universal Work Queue](#)
- [Installing Oracle Universal Work Queue Server](#)
- [Configuring Universal Work Queue Server](#)
- [Starting Universal Work Queue Server](#)
- [Creating an Oracle Universal Work Queue User](#)
- [Configuring Universal Work Queue Media Screen Pops](#)
- [Troubleshooting Universal Work Queue](#)

## Considerations for Planning an Implementation Project

### Purpose for Planning an Implementation

The importance of implementation planning cannot be overemphasized. If you know where you need to go and have a plan to get there, then half the work is done. Implementing Oracle Universal Work Queue (UWQ) is a complex process that requires knowledge of a variety of technologies and processes.

UWQ implementation planning requires that you take a careful and detailed look at the following area:

- Assessing requirements
- Gathering data
- Scheduling and coordinating resources
- Understanding the installation and configuration process
- Verifying and testing the implementation

**Assessing Requirements** There are two types of requirements that need to be considered, operational requirements and technical requirements. The operational requirements include items such as the integration with desktop applications, call center technology, hours of operation, budget, and existing automation. These are business requirements that should have been established at the beginning of the project. The technical requirements specify the minimum capabilities for the systems and equipment in the UWQ environment. For Oracle Universal Work Queue to meet the operational requirements and level of service specifications, specific-sized servers and data links are required.

**Gathering Data** Installation and configuration of Oracle Universal Work Queue requires a significant collection of data about the existing systems and networks in the call center environment. This data, which includes names and addresses of databases and servers, is needed during the implementation process. This information must be available at the time of implementation. Missing data can significantly delay the implementation effort and cause scheduling problems. It is best to have all data collected and ready prior to implementation.

**Schedule and Coordinate Resources** Be sure to understand the dependencies for the implementation effort. Scheduling and coordination of resources are essential.

**Understanding the Installation and Configuration Process** Read and understand the installation and configuration documentation. The documentation details everything that must happen to result in a successful implementation. The better your understanding of the process, the more easily you will be able to assist the implementation team.

**Verifying and Testing the Implementation** Finally, plan on verifying and testing the implementation.

## **Elements of an Implementation Plan**

The implementation plan should have four elements:

- Requirements assessment
- Worksheets and checklist
- Installation and configuration process
- Operational testing

**Requirements Assessment** Requirements assessment consists of reviewing the operational and technical requirements for the call center.

**Worksheets and Checklist** The data-gathering process generates a large amount of information that must be classified and available during implementation.

**Installation and Configuration Process** The installation and configuration of UWQ involves a specific sequence of activities. These activities are detailed later in this guide and in the installation and administration documentation.

**Operational Testing** The final part of the implementation is the operational testing of UWQ. Operational testing should be highly customized for each call center. Testing should be detailed and complete. Review your operational requirements to develop test procedures and include these in the implementation plan.

## Business Requirements Mapping

Business requirements mappings aid in mapping the customers wants and needs against what a product can actually provide.

### Defining the Business Need for Oracle Universal Work Queue

- Agents need to interact with customers & prospects using various forms of media.
- Make it easier for applications in CRM to be media enabled, or multi-work enabled.
- Meet service levels across multiple forms of media.
- Assist with capture of customer interactions used to build Business Intelligence.
- Aim to decouple applications, client media enablers (i.e., SoftPhone), and server media providers (i.e., Oracle Telephony Manager/ Multi Channel Manager) to allow future extensions. Note: Oracle Telephony Manager (OTM) is also referred to as Multi Channel Manager (MCM) since server media providers can provide work items such as inbound e-mail.

### **The Strategy/Requirements for Meeting the Business Need for UWQ**

- Create a UI that applications can use to enable agents to work with various media.
- Provide APIs and notifications to allow applications consistent integration with various media.
- Use Interaction Blending to achieve level of service requirements without adding complexity to applications.
- Provide APIs for applications to emit customer interaction data as part of interacting with UWQ.
- Achieve decoupling by enforcing separation of media types and media providers. However, we have wavered on this a bit because some applications have special needs.

### **Defining The Universal Work Concept**

When mixing work of different types, we need to create the concept of Universal Work. Consider the differences between the following types of work:

- DB centric types of work:
  - Tasks
  - Messages
- Media server types of work:
  - Inbound Telephony & Email
  - Outbound Telephony

### **Defining Work - (DB)**

- Tasks
  - To-Dos, Call Backs, Leads, Quotes, Opportunities.
  - Explicitly assigned to an agent.
  - Line item agent selectable.
- Service Requests
- Defects
- Messages, Notifications

### **Defining Work - (Media Servers)**

- OTM/MCM
  - Inbound Telephony, Inbound Email and Web Callback.
  - Distributed by business rules in enterprise, e.g. Route to skill set "X" or first available agent.
  - Counts only relevant at run-time, and is at best an estimate of potential calls for that agent.
- Advanced Outbound
  - Outbound Telephony.
  - Contact lists loaded, associated with a Campaign.

## **Reviewing the Key Benefits of Oracle Universal Work Queue**

### **Unified View of Agent Work**

- UWQ "Work Portal"
- Unified queue summary
- Agent "task assignment" detail
- Email, Inbound & Outbound Telephony and Web Callback
- Task Management, To-Dos, Call Backs, Leads, Quotes, Opportunities
- Service Requests, Defects, Messages, Notifications
- Post 11i - Web Collaboration & IP Telephony

### **Simplified Multi-Media Integration**

- Allows CRM applications to
  - Display information about...
  - Request work from...
  - Receive data corresponding to...
  - Track agent-customer interactions to... multiple media and tasks assignment work queues
- Provides Multiple Media Access and Delivery to CRM Apps
- "Abstracts" media integration
- Speeds time to market for new media solutions

### **Interaction Blending Integration**

- Insures business rules for service levels across multiple "media" work queues
- LOS, Quotas, # Resources
- Automated, dynamic assignment of agent work
- Optimizes staffing levels
- Improves Agent Productivity
- No extra effort required from applications configuration of Interaction Blending

### **Assist Capture of Business Intelligence**

UWQ provides API to buffer application from IH and CCI:

- Multiple actions within an interaction (e.g., add/delete customer, reconcile account)
- Multiple medias within an interaction (e.g., inbound call and email)
- Supports time, media, outcome tracking
- Business application-specific data to BIS to achieve historical and real time Call Center Business Intelligence

## Decouple Media Layers

Decoupling various layers allows:

- New media providers to be written without application knowledge.
- New media providers to be written without media controller knowledge.
- New media controllers to be written without application knowledge.

## Application architecture

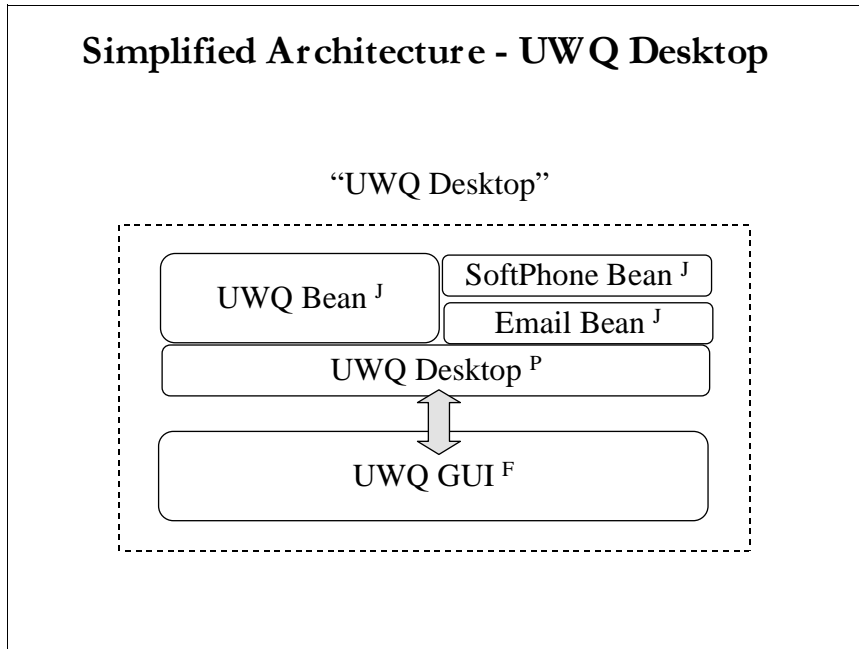
The following diagrams of the application architecture for UWQ are purposely simplified. UWQ is actually doing quite a bit of work in coordinating the communications and delivery of media. Here are examples of details that are not shown in the diagrams:

- Email client has an "out of band" media delivery that does not go through the server (when a user opens an item directly). However, the application gets the same media delivery event and doesn't have to be aware.
- OTM/MCM has a bit of a different concept of queues, everything is based on skill sets, so we fabricate a view for the UI from run-time data.
- Network communications layer to desktop is special code to be able to pass events back to the client (not normal web model).

The letters referenced in the following diagrams are defined as:

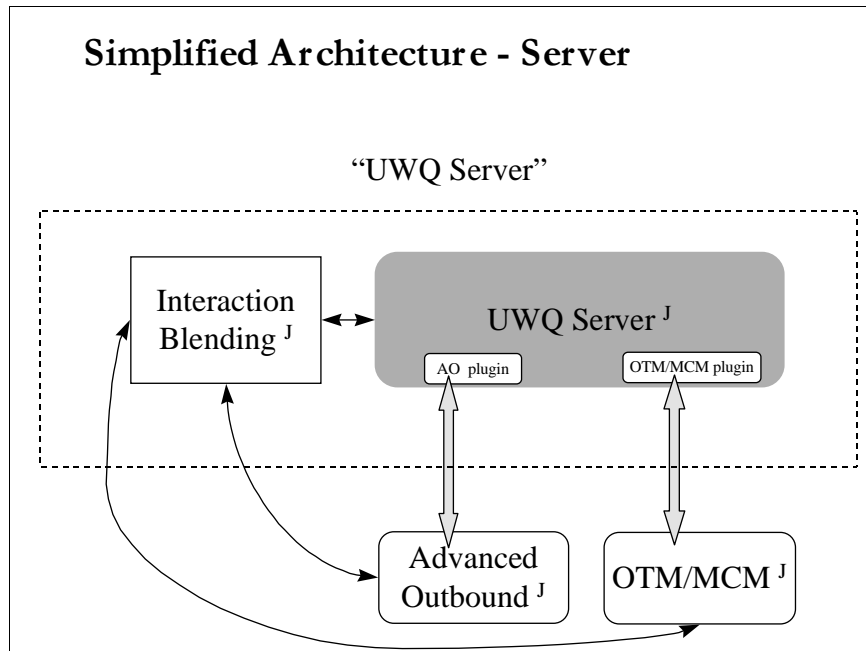
- J - Java API
- P - PL/SQL
- F - Forms component

**Simplified Desktop Architecture Diagram**



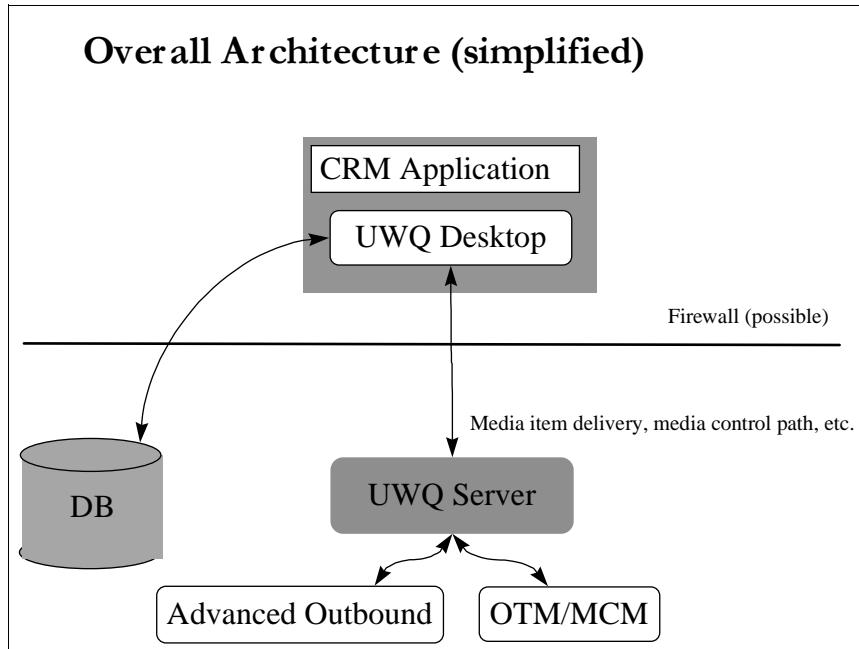
The Simplified Desktop Architecture Diagram illustrates the composition of the UWQ desktop components. The UWQ bean is capable of talking to the UWQ server when need be, and the UWQ PL/SQL API is a Forms wrapper to the Java bean. Notice that the UWQ Forms UI uses this Forms wrapper, and other applications also can use this wrapper. The Softphone and Email beans simply demonstrate the ability for the client bean to allow future extensibility by adding on client media enablers. However, those components are not part of UWQ.

**Simplified Server Architecture Diagram**



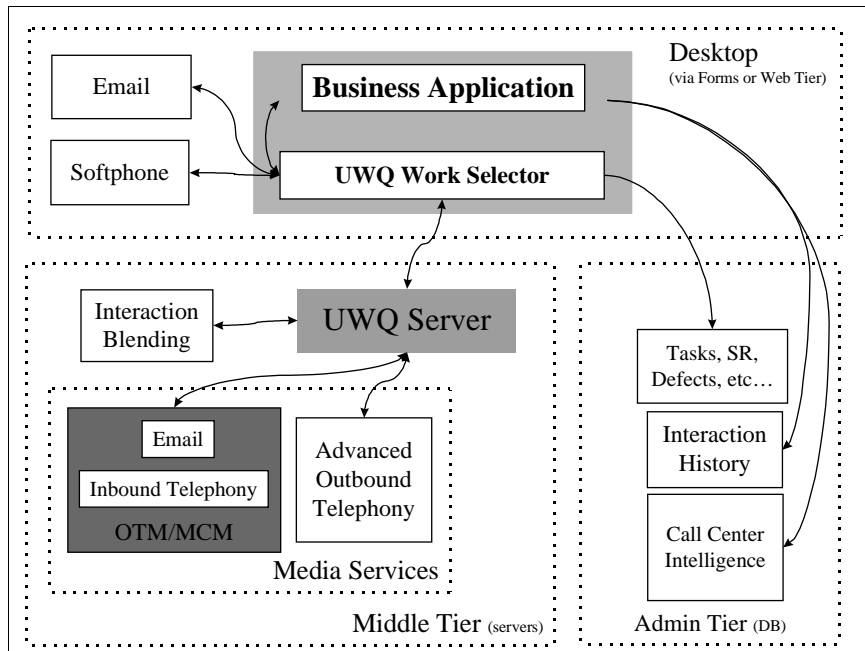
The Simplified Server Architecture Diagram illustrates the composition of the UWQ server environment. Similar to the way the client allows client media enablers to be plugged in, the UWQ server allows media providers to be plugged in. The plug-ins implement a published UWQ interface, and know how to communicate with their media provider, acting as the glue between new media providers and the UWQ server. UWQ server is natively aware of the Interaction Blending server, and communicates with it automatically if an Interaction Blending server is in the same Server Group (a.k.a, Interaction Center, Call Center).

**Overall Architecture Diagram (simplified)**



The Overall Architecture Diagram (simplified) illustrates the relationship of the desktop and server components in brief. This is only useful to point out that the UWQ desktop obtains non-media work from using the database (i.e., Tasks, Service Requests, etc.), and that the UWQ server is only needed when media providers are involved.

**UWQ Architecture Diagram**



The UWQ Architecture Diagram illustrates the major components involved in the UWQ Architecture, how they relate to each other, and which tier each component is installed on. Notice that business applications use the Interaction History and Call Center Intelligence APIs directly, while the UWQ desktop application uses the database to obtain non-media work.

## End user role and functions

Oracle Universal Work Queue provides an agent with a unified, common view of the work that is to be performed by the agent. You could consider this common view a "work portal" for agents. Universal Work Queue serves as a conduit to Oracle CRM business applications for the presentation and delivery of agent work items. These work items include media, tasks, defects, and service requests. Media items include inbound, outbound, and e-mail. From Universal Work Queue, you can directly select the items to work.

When Oracle Interaction Blending is installed and in use, Oracle Universal Work Queue will automatically present work items to an agent. Work items are presented based on skill level, service levels, and business rules. These attributes and requirements which are established in Oracle CRM business applications, ensure that service levels, customer support, and business requirements are satisfied.

Oracle Universal Work Queue provides access to tasks, which originate and are assigned in Oracle CRM business applications for an agent to work. These tasks include such functions as, to-do lists, call backs, quotes, opportunities, etc.

All agent-customer interactions that occur from the work performed through Oracle Universal Work Queue are tracked and recorded. The details of these interactions can be viewed in the applicable Oracle CRM business application.

The end user of the Oracle Universal Work Queue product can use the application to perform the following business tasks:

- View an Agent's Work Queue
- Select Agent Work
- Work Media Items
- Handle Inbound Calls / Web Callbacks
- Conduct Outbound Calls
- Process Electronic Mail
- View Tasks
- Select Tasks to Work
- Review Defects
- Work Service Requests
- Monitor My Work (monitor the number and status of work items assigned to an agent)

Reference *Oracle Universal Work Queue Concepts and Procedures Release 11i* for process-oriented, task-based procedures for using the application to perform the business tasks listed above.

## Typical Release Dependencies

### Related Products and Components

The products and components listed below affect the implementation and ongoing operation of Oracle Universal Work Queue.

#### Oracle Applications

Oracle Applications are required for establishing users, and are needed for foundation code.

#### Oracle HRMS

Oracle HRMS is required for establishing users (CRM Resource Manager uses this).

#### CRM Foundation Components

CRM Foundation Components are required for CRM foundation code.

- Interaction History
  - Required for applications to record interactions with a customer.
- Resource Manager
  - Required for uniquely identifying agents.
- Task Manager
  - Required to provide access to Tasks a user can work on.

#### Service Request Manager

The Service Request Manager is required to provide access to Service Requests a user can work on.

#### Defect Management System

The Defect Management System is required to provide access to Defects a user can work on.

### **Oracle Call Center Products**

- Oracle Telephony Manager  
Required when access to Inbound Telephony, Inbound Email, or Web Callbacks is needed in a Call Center.
- Oracle Advanced Outbound  
Required when access to Outbound Telephony is needed in a Call Center.
- Oracle Interaction Blending  
Required when Interaction Blending is needed in a Call Center.

### **Implementation Starting Point**

At the start of your implementation, you will have a server which has either Windows NT or a Sun Sparc. Oracle 8i RDBMS server should be installed.

Oracle CRM 11i "Rapid Install" is required, with CRM Family Pack 1.

Before you can begin the set up process, the following must be completed:

- Oracle Applications 11.5.1. administrative-tier installation (including the CRM 11i schema and Oracle 8i)
- Oracle Applications 11.5.1. web-tier installation on each machine identified for installation of Oracle Call Center Applications Setup components
- Installation of all Oracle Call Center Applications Setup components identified for your deployment configuration. The components could include the following:
  - Oracle Universal Work Queue
  - Oracle Telephony Manager
  - Oracle Telephony Media Control
  - Oracle Inbound Telephony Server
  - Oracle Routing Server
  - Oracle Server Monitor
  - Oracle Email Center Server
  - Oracle Advanced Inbound Server
  - Oracle Advanced Outbound Server

- Oracle IVR Server
- Oracle Forms Server
- Oracle IM Server
- Oracle Interaction Blending Server

## Considerations and constraints

UWQ was written to support future extensions by 3rd parties, but it can get quite complicated to perform these extensions for someone who doesn't realize the many tasks that UWQ is performing internally. Therefore, attempting to implement extensions like these is not advisable without first consulting the UWQ Product Management team.

When considering scalability requirements, note that multiple UWQ servers can be deployed in each Call Center, and that the desktop bean will choose the least loaded server upon connecting. This is not a dynamic load balancing scheme, but a one-time, connection load-balancing scheme. This scheme serves very useful for both scalability and some stateless redundancy, and is not as error-prone as more elaborate schemes tend to be. In fact, for fault tolerance, the UWQ bean can actually reconnect to a different UWQ server in the same group, in some cases without any user intervention.

UWQ servers cannot service multiple server groups, which means that every UWQ server can service only the group it has been assigned to. Likewise, agents can only be assigned to one server group. Together, this means that each server group, or call center, must be self-sufficient. Because multiple servers can be deployed in each server group, this handles large installations very well. However, in smaller installations you will not be able to have a set of UWQ servers service multiple call centers, which is only a consideration in smaller installations.

## Related Documentation and Resources

The following related documentation is available:

**Oracle Applications Concepts** This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11i. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind, and major issues, for Applications-wide features such as Business Intelligence (BIS), languages and character sets, and self-service applications.

**Installing Oracle Applications, Release 11i** Installing Oracle Applications provides instructions for managing your installation of Oracle Applications products. In this release of Oracle Applications, much of the installation process is handled using the new Oracle Rapid Install product, which minimizes the time it takes to install Oracle Applications and the Oracle8i Enterprise Edition technology stack by automating many of the required steps.

**Implementing CRM Applications** Implementing CRM Applications provides instructions for completing your installation of Oracle Customer Relationship Management (CRM) products.

**Oracle Call Center Applications Setup** This guide covers the installation of the Oracle Call Center and Telephony Applications components.

**Oracle Universal Work Queue Concepts and Procedures** The concepts and procedures document provides information and instructions to help you work effectively with Oracle Universal Work Queue.

**Oracle Telephony Manager Concepts and Procedures** The concepts and procedures document provides information and instructions to help you work effectively with Oracle Telephony Manager.

**Oracle Applications System Administrator's Guide** This guide is the primary source of information about Oracle Applications System Administration. It contains overviews as well as task and reference information.

**Managing People Using Oracle HRMS** This guide contains the information you need to understand and use Oracle HRMS.

Oracle CRM Foundation Components Concepts and Procedures This Concepts and Procedures provides information and instructions to help you work effectively with Oracle Foundation.

## Setting Up Oracle Universal Work Queue

Follow the steps in the following table to set up Oracle Universal Work Queue. The Required columns indicate whether a step is required. The Setup Step Description column describes a high-level step and, where applicable, provides a reference to a more detailed topic in this document. The Oracle Documentation Reference column provides a reference to other relevant documents.

Step Number	Required for Non-Media Work?	Required for Media Work?	Setup Step Description	Oracle Documentation Reference
<input type="checkbox"/> Step 1	Yes	Yes	<b>Install Oracle Applications.</b>	<i>Installing Oracle Applications</i>
<input type="checkbox"/> Step 2	No	Yes	<b>Install and configure the media platforms.</b>	<i>Installing Oracle Call Center Connectors</i> <i>Installing Oracle Email Server</i> <i>Oracle eMail Center Implementation Guide</i>
<input type="checkbox"/> Step 3	No	Yes	<b>Install the interaction center servers.</b> See: <a href="#">Installing Oracle Universal Work Queue Server</a>	<i>Oracle Call Center Applications Setup</i>
<input type="checkbox"/> Step 4	No	Yes	<b>Create an interaction center server group.</b>	<i>Oracle Telephony Manager Implementation Guide</i>
<input type="checkbox"/> Step 5	No	Yes	<b>Configure the interaction center server group.</b>	<i>Oracle Telephony Manager Implementation Guide</i>
<input type="checkbox"/> Step 6	No	Yes	<b>Configure the interaction center server parameters.</b> See: <a href="#">Configuring Universal Work Queue Server</a>	<i>Oracle Telephony Manager Implementation Guide</i> <i>Oracle eMail Center Implementation Guide</i>
<input type="checkbox"/> Step 7	Yes	Yes	<b>Create an Oracle Universal Work Queue user.</b> See: <a href="#">Creating an Oracle Universal Work Queue User</a>	<i>Oracle Universal Work Queue Implementation Guide</i>
<input type="checkbox"/> Step 8	Yes	Yes	<b>Configure the media-based screen pops.</b> See: <a href="#">Configuring Universal Work Queue Media Screen Pops</a>	<i>Oracle Universal Work Queue Implementation Guide</i>

## Installing Oracle Universal Work Queue Server

Use this procedure to install Oracle Universal Work Queue Server to a physical machine.

### Prerequisites

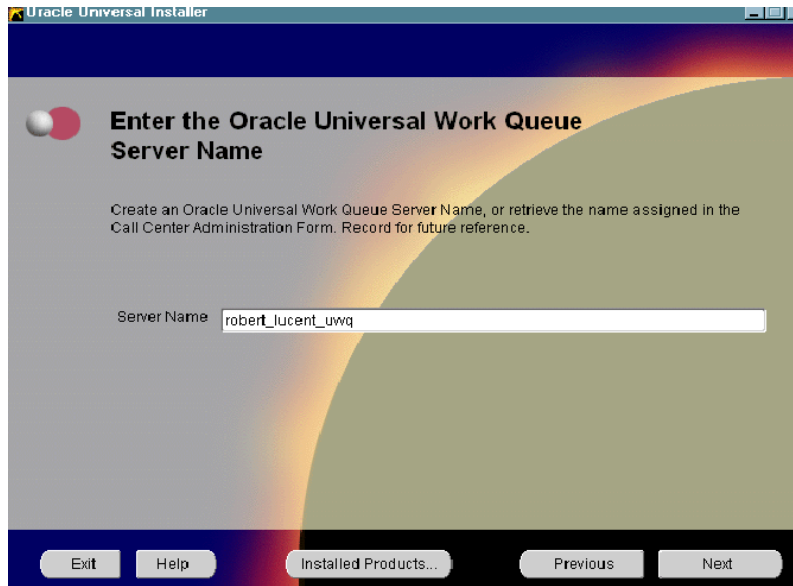
- ❑ Install Oracle Applications.
- ❑ Install and configure the media platforms.
  - For telephony media,
    - Install and configure a switch that is certified or supported by Oracle.
    - Install and configure third-party CTI middleware that is certified or supported by Oracle for the specified switch.
    - Install Oracle Call Center Connectors (see *Installing Oracle Call Center Connectors*).
  - For email media,
    - Install and configure Oracle Email Server (see *Oracle eMail Center Implementation Guide*).
- ❑ Perform a web tier installation of Oracle Applications on the machine.

### Steps

For detailed installation procedures, see *Oracle Call Center Applications Setup*.

### Guidelines

In the following example, the Oracle Universal Work Queue Server name is robert\_lucent\_uwq. This name should be used when configuring the parameters for Oracle Universal Work Queue Server (see [Configuring Universal Work Queue Server](#)).



### See Also

- [Modifying the Name of Oracle Universal Work Queue Server](#)
- [Modifying Database Connection Parameters for Interaction Center Servers](#)

## Modifying the Name of Oracle Universal Work Queue Server

Use this procedure to modify the name of Oracle Universal Work Queue Server after it has been installed.

### Prerequisites

- Install the interaction center servers (see [Installing Oracle Universal Work Queue Server](#)).

### Steps

1. On the machine on which Oracle Universal Work Queue Server is installed, go to `PRODUCT_COMM\admin\scripts\cct`.
2. Open `ieusvr.bat` using an ASCII editor (such as Notepad).

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**Note:** The `ieusvr.bat` file is used to start Oracle Universal Work Queue Server (see [Starting Universal Work Queue Server](#)).

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3. Modify the server name.

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**Note:** This name should be used when configuring the parameters for Oracle Universal Work Queue Server (see [Configuring Universal Work Queue Server](#)).

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4. Save `ieusvr.bat`.

### See Also

- [Modifying Database Connection Parameters for Interaction Center Servers](#)

## Modifying Database Connection Parameters for Interaction Center Servers

Use this procedure to modify the database connection parameters for a machine hosting interaction center servers.

### Prerequisites

- ❑ Install the interaction center servers (see [Installing Oracle Universal Work Queue Server](#)).

### Steps

1. On the machine on which Oracle Universal Work Queue Server is installed, go to `PRODUCT_COMM\admin\scripts\cct`.
2. Open `cct.dbc` using an ASCII editor (such as Notepad).
3. Modify the database connection parameters.

---

---

**Note:** If you are using multiple machines to host interaction center servers, be sure to manually modify the database connection parameters on all interaction center server machines.

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4. Save `cct.dbc`.

## Guidelines

The following table lists the database parameters fields available during installation of the interaction center servers and their corresponding parameters in the cct.dbc file.

Installation Field	CCT.DBC Parameter	Description/Default
TWO_TASK	TWO_TASK	Database name
FNDNAM	FNDNAM	apps
GWYUID	GWYUID	gateway user id/password
Database Host	DB_HOST	Database host name
Database Port	DB_PORT	Database port number
Application User Password	GUEST_USER_PWD	application userid/password

The following is an example of a cct.dbc file:

```
#DB Settings
#Thu Aug 19 18:47:53 PDT 1999
#APPL_SERVER_ID=
TWO_TASK=tst115
FNDNAM=apps
GWYUID=applsypub/pub
FND_MAX_JDBC_CONNECTIONS=20
GUEST_USER_PWD=admin/welcome
APPS_JDBC_DRIVER_TYPE=THIN
DB_HOST=ap100sun
DB_PORT=1521
```

## See Also

- [Modifying the Name of Oracle Universal Work Queue Server](#)

## Configuring Universal Work Queue Server

Use this procedure to configure the parameters for Oracle Universal Work Queue Server.

### Prerequisites

- Install Oracle Applications.

- ❑ Install and configure the media platforms.  
For telephony media,
  - Install and configure a switch that is certified or supported by Oracle.
  - Install and configure third-party CTI middleware that is certified or supported by Oracle for the specified switch.
  - Install Oracle Call Center Connectors (see *Installing Oracle Call Center Connectors*).For email media,
  - Install and configure Oracle Email Server (see *Oracle eMail Center Implementation Guide*).
- ❑ Obtain an Oracle Applications user account with access to a Call Center Admin responsibility.

### Steps

1. Select the Call Center Admin responsibility.
2. In the Navigator window, on the Functions tab, choose **Call Center Admin > Call Center Administration**.  
The Call Center Administration window appears.
3. Click **Server Admin**.  
The Server Locator window appears.
4. Select the Server tab.
5. Choose **File > New**.
6. In the Server Registration area, identify the server process.
  - a. Enter a unique name for the Universal Work Queue server.
  - b. Optionally, enter the location of the Universal Work Queue server.
  - c. From the Type Name list, select **Universal Work Queue Server**.
  - d. From the Member Group Name list, select the server group for this server process.

---

---

**Note:** The DNS Name and IP address are automatically published when the server is up running.

---

---

7. In the Server Parameter area, configure the parameters for the Universal Work Queue server.

Each row in the table corresponds to a server parameter. Parameters:

- a. From the Parameter Name list, select `SERVER_PORT`.
- b. Enter a value for the parameter.

---

---

**Note:** The default server port number for Oracle Universal Work Queue Server is 80. However, this is a commonly used port. If when Oracle Universal Work Queue Server is started, there is error message that the port is already in use, you can modify the port number in the Server Locator window on the Server tab.

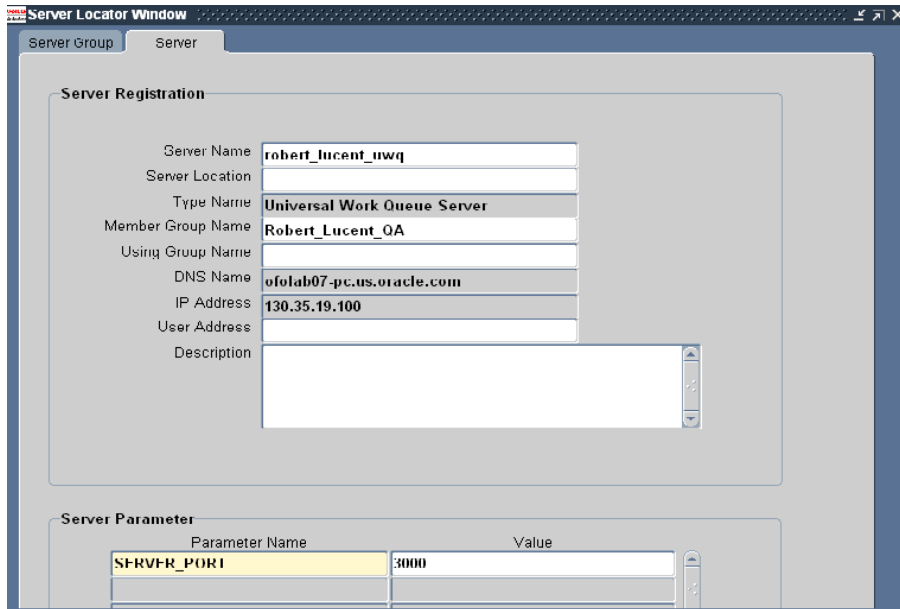
---

---

8. From the **File** menu, choose **Save**.

### Guidelines

In the following example, the name of the Oracle Universal Work Queue Server is `robert_lucent_uwq` and the server port is 3000. This server process belongs to a interaction center server group named `Robert_Lucent_QA`.



### See Also

- [Oracle Universal Work Queue Server Parameters](#)

## Starting Universal Work Queue Server

Use this procedure to start Oracle Universal Work Queue Server.

---

---

**Note:** If you are not using Server Monitor, be sure to start Routing Server before starting Oracle Telephony Manager Server. For more information, see *Oracle Telephony Manager Implementation Guide*.

---

---

### Prerequisites

- ❑ Install the interaction center servers (see [Installing Oracle Universal Work Queue Server](#)).

## Steps

1. On the machine on which Oracle Universal Work Queue Server is installed, go to `PRODUCT_COMM\admin\scripts\cct`.
2. Execute `ieusvr.bat`.

## Guidelines

See [Oracle Universal Work Queue Server Command Line Parameters](#).

## See Also

# Creating an Oracle Universal Work Queue User

Follow the steps in the following table to create an Oracle Universal Work Queue user. The Required column indicates whether a step is required. The Setup Step Description column describes a high-level step and, where applicable, provides a reference to a more detailed topic in this document. The Responsibility column indicates the Oracle Applications user account responsibility required to complete the step. The Navigation column provides the path for navigating to the necessary window.

Step Number	Required?	Setup Step Description	Responsibility	Navigation
<input type="checkbox"/> Step 1	Required	<b>Create an employee in Oracle Human Resource Management Systems.</b> See: <a href="#">Creating an Employee in Oracle Human Resource Management Systems</a>	(US) HRMS Manager	People > Enter and Maintain
<input type="checkbox"/> Step 2	Required	<b>Create an Oracle Applications user account for the employee.</b> See: <a href="#">Creating an Oracle Applications User Account</a>	System Administrator	Security > User > Define
<input type="checkbox"/> Step 3	Required	<b>Create a CRM (Customer Relationship Management) resource for the employee.</b> See: <a href="#">Creating a CRM Resource</a>	CRM Resource Manager	Maintain Resources > Import Resources
<input type="checkbox"/> Step 4	Required	<b>Assign interaction centers roles to the CRM resource.</b> See: <a href="#">Assigning Interaction Center Roles to a CRM Resource</a>	CRM Resource Manager	Maintain Resources > Resource

Step Number	Required?	Setup Step Description	Responsibility	Navigation
<input type="checkbox"/> Step 5	Required	<p><b>Assign an interaction center server group to the CRM resource.</b></p> <p>See: <a href="#">Assigning an Interaction Center Server Group to a CRM Resource</a></p>	CRM Resource Manager	Maintain Resources > Resource
<input type="checkbox"/> Step 6	Optional	<p><b>Configure the Oracle Universal Work Queue profile options for the employee's user account.</b></p> <p>See: <a href="#">Setting Universal Work Queue User Profile Options</a></p>	System Administrator	Profiles > System

## Creating an Employee in Oracle Human Resource Management Systems

Use this procedure to create an employee in Oracle Human Resource Management Systems (HRMS).

### Prerequisites

- Review *Managing People Using Oracle HRMS*.
- Obtain an Oracle Applications user account with access to an HRMS Manager responsibility.

### Steps

1. Select an HRMS Manager responsibility (for example, US HRMS Manager).
2. In the Navigator window, on the Functions tab, choose **People > Enter and Maintain**.  
A Decision window appears.
3. To change the effective date, click **Yes**; otherwise, click **No**.  
The Find window appears.
4. Click **New**.  
The People window appears.
5. Enter the information for the new person.

---



---

**Note:** In the Type field, select **Employee**.

---



---

6. From the **File** menu, choose **Save**.

### Guidelines

In the following example, Newton Taliaferro is a person in Oracle HRMS. He has a type of Employee. His employee number is 821709.

Required fields include:

- Last (Name)
- Gender
- Type
- Employee (Number)

The screenshot displays the Oracle Applications HRMS interface for the 'People' form. The window title is 'Oracle Applications - tst115'. The menu bar includes 'File', 'Edit', 'View', 'Folder', 'Tools', 'Window', and 'Help'. The toolbar contains various icons for navigation and actions. The main form area is titled 'People' and contains several sections:

- Name:** Last: Taliaferro, First: Newton, Title, Prefix, Suffix, Middle.
- Gender:** Male (dropdown).
- Type:** Employee (dropdown).
- Latest Hire Date:** 26-DEC-2001.
- Date First Hired:** 26-DEC-2001.
- Identification:** Social Security: 021-73-6212, Employee: 821709, Applicant.
- Personal:** Birth Date: 27-JAN-1972, Age: 29, Town of Birth, Region of Birth, Country of Birth: United States, Status: Single, Nationality: American, Registered Disabled.
- Effective Dates:** From: 26-DEC-2001, To: (empty).
- Buttons:** {Address \*\*\*\* \*...}, {Picture \*\*\*\* \*...}, {Assignment \*\*\*\* \*...}, {Special Info \*\*\*\* \*...}, Qthers...

The status bar at the bottom shows: 'FRM-40400: Transaction complete: 1 records applied and saved. Record: 2/2'.

### See Also

- [Creating an Oracle Applications User Account](#)

- [Creating a CRM Resource](#)
- [Assigning Interaction Center Roles to a CRM Resource](#)
- [Assigning an Interaction Center Server Group to a CRM Resource](#)
- [Setting Universal Work Queue User Profile Options](#)

## Creating an Oracle Applications User Account

Use this procedure to create an Oracle Applications user account and to associate a person in Oracle Human Resource Management Systems (HRMS) with a user account.

### Prerequisites

- Review *Oracle Applications Systems Administrator's Guide*.
- Obtain an Oracle Applications user account with access to the System Administrator responsibility.

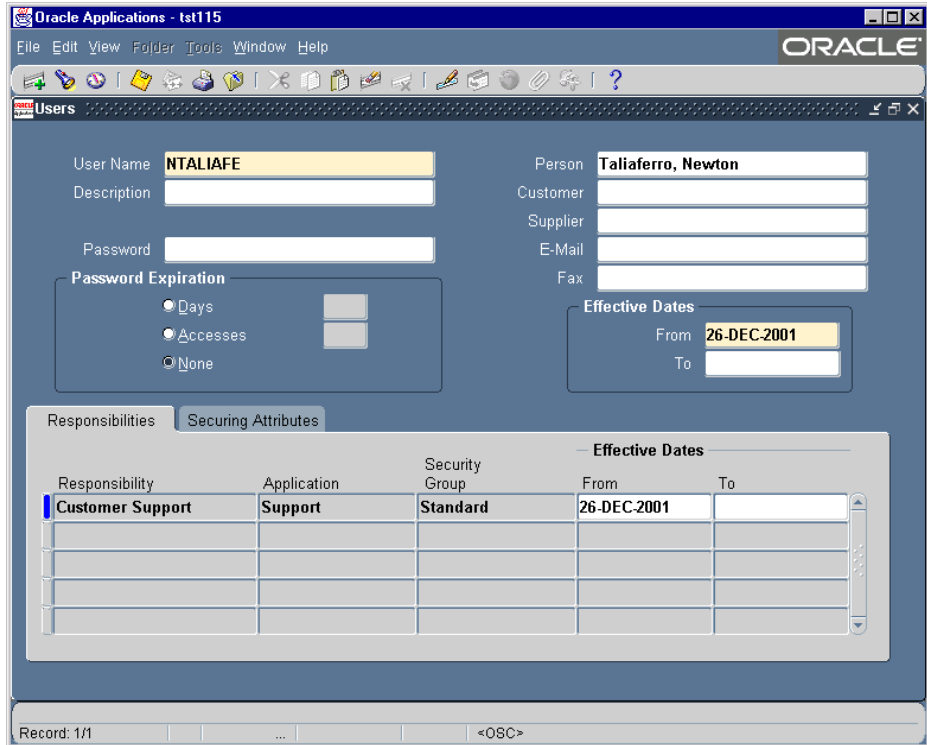
### Steps

1. Select the System Administrator responsibility.
2. In the Navigator window, on the Functions tab, choose **Security > User > Define**.  
The User window appears.
3. In the User Name field, enter the name of the user account.
4. In the Password field, enter the password for the user account and then enter the password again to verify it.
5. In the Person field, select a person from Oracle HRMS to be associated with the user account.
6. In the Responsibilities tab, add a responsibility with access to the Universal Work Queue client (for example, Customer Support).
7. From the **File** menu, choose **Save**.

### Guidelines

In the following example, NTALIAFE is an Oracle Applications user account. Newton Taliaferro, a person in Oracle HRMS, is associated with the NTALIAFE user

account. A user who logs in to Oracle Applications using the NTALIAFE user account will have access to windows in the Customer Support responsibility.



### See Also

- [Creating an Employee in Oracle Human Resource Management Systems](#)
- [Creating a CRM Resource](#)
- [Assigning Interaction Center Roles to a CRM Resource](#)
- [Assigning an Interaction Center Server Group to a CRM Resource](#)
- [Setting Universal Work Queue User Profile Options](#)

## Creating a CRM Resource

Use this procedure to create a Customer Relationship Management (CRM) resource based on a person in Oracle Human Resource Management Systems (HRMS).

### Prerequisites

- ❑ Review *Oracle CRM Foundation Concepts and Procedures*.
- ❑ Obtain an Oracle Applications user account with access to the CRM Resource Manager responsibility.

### Steps

1. Select the CRM Resource Manager responsibility.
2. In the Navigator window, on the Functions tab, choose **Maintain Resources > Import Resources**.  
The Selection Criteria window appears.
3. In the Resource Category field, select **Employee**.
4. Enter any additional selection criteria.
5. Click **Search**.  
Employees that meet the search criteria are listed in the Search Results area. The Select check boxes for the matching employees are automatically selected.
6. Clear the Select check box of the employees for which you do not want to create a CRM resource.
7. Click **Create Resource**.  
The Default Values window appears. Use the Default Values window to apply a (Resource) Start Date, (Resource) End Date, Role, Role Start Date, and Role End Date to the resources that you want to create. You can also add or modify this information in the resource details later.
8. To apply default values to the selected resources, enter the information and then click **OK**; otherwise click **Cancel**.  
The Selected Resources window appears. A transaction number is associated with each resource created during this transactions. More than one resource can have the same transaction number. In the Comments field, "New Record" indicates that a new resource will be created for the employee.  
The Select check boxes for the matching employees are automatically selected.
9. Clear the Select check box of the employees for which you do not want to create a CRM resource.
10. To confirm the creation of the resources, click **Save Resources**.
11. To view the details for a resource, click **Details**.

## Guidelines

In the following example, the selection criteria for creating a resource is:

- Resource Category: Employee
- (Employee) Number: 821709

The Search Results area lists Newton Taliaferro, an employee in Oracle HRMS.

The screenshot shows the 'Selection Criterion' window in Oracle Applications. The window title is 'Oracle Applications - tst115'. The menu bar includes 'File', 'Edit', 'View', 'Folder', 'Tools', 'Window', and 'Help'. The toolbar contains various icons for file operations. The main area is titled 'Selection Criterion' and contains the following fields:

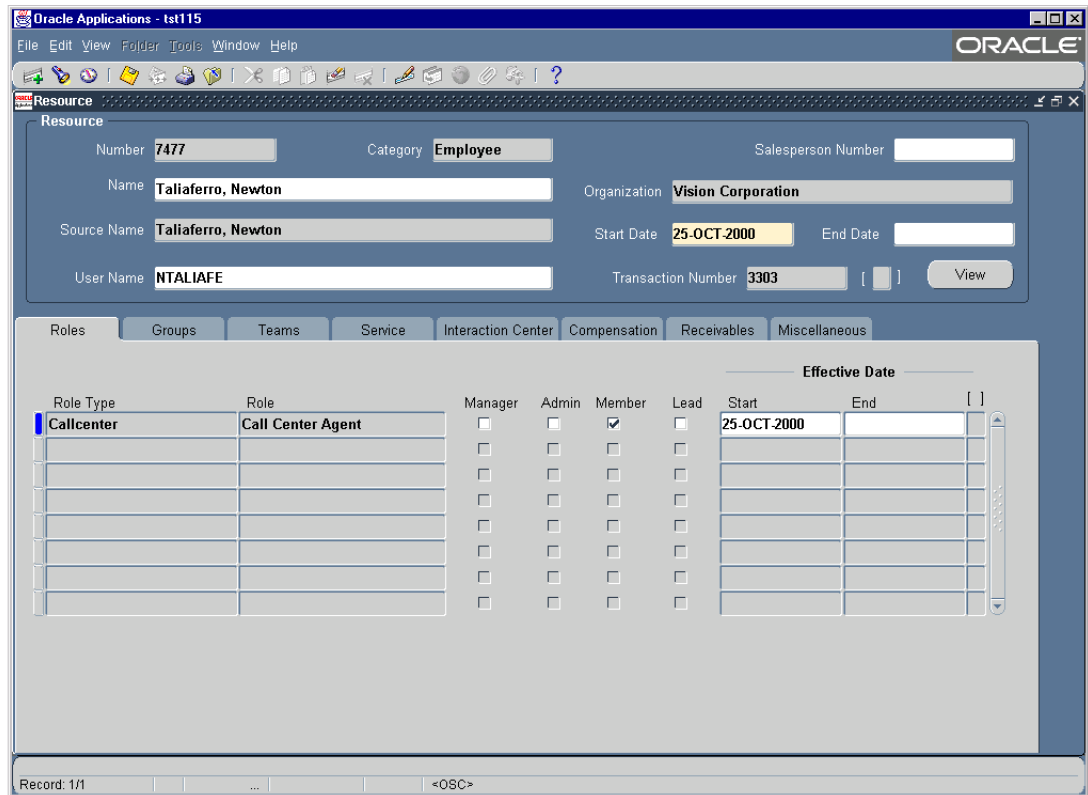
- Resource Category:** A dropdown menu set to 'Employee'.
- Number:** A text field containing '821709'.
- Name:** A text field containing 'Taliaferro, Newton'.
- Job Title:** An empty text field.
- Competencies:** An empty text field.
- Scale:** An empty text field.
- Level: Max:** An empty text field.
- Min:** An empty text field.
- Scale Level:** An empty text field.

Below the search criteria are two buttons: 'Search' and 'Clear'. The 'Search Results' section contains a table with the following data:

Select	Category	Name
<input checked="" type="checkbox"/>	EMPLOYEE	Taliaferro, Newton
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

At the bottom right of the search results area is a 'Create Resource' button. The status bar at the bottom of the window shows 'Record: 1/1' and '<OSC>'.

The resource details show the name of the employee and the user account associated with the employee. Every CRM resource has a resource number (see the Number field in the Resource window). If resource information is imported based on an employee in Oracle HRMS, then the CRM resource also has a transaction number (see the Transaction Number fields in the Resource window).



**See Also**

- [Creating an Employee in Oracle Human Resource Management Systems](#)
- [Creating an Oracle Applications User Account](#)
- [Assigning Interaction Center Roles to a CRM Resource](#)
- [Assigning an Interaction Center Server Group to a CRM Resource](#)
- [Setting Universal Work Queue User Profile Options](#)

**Assigning Interaction Center Roles to a CRM Resource**

Use this procedure to assign roles to a Customer Relationship Management (CRM) resource.

### Prerequisites

- ❑ Review *Oracle CRM Foundation Concepts and Procedures*.
- ❑ Obtain an Oracle Applications user account with access to the CRM Resource Manager responsibility.

### Steps

1. Select the CRM Resource Manager responsibility.
2. In the Navigator window, on the Functions tab, choose **Maintain Resources > Resources**.

The Find window appears.

3. Enter any additional selection criteria.
4. Click **Search**.

The Resource window is displayed.

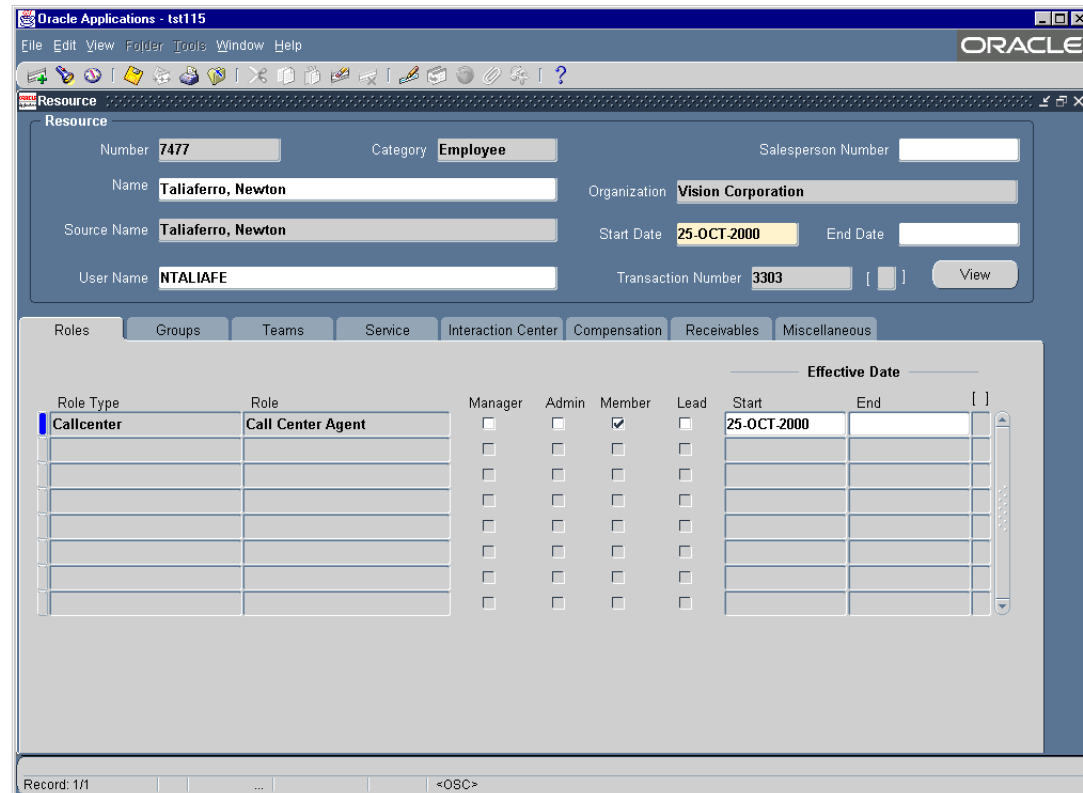
5. In the Roles tab, assign a call center role.
  - a. In the Role Type field, select **Callcenter**.
  - b. In the Role field, select the role.

The list of available roles is determined by the selected role type.

6. From the **File** menu, choose **Save**.

### Guidelines

In the following example, Newton Taliaferro has a role of Call Center Agent.



**See Also**

- [Creating an Employee in Oracle Human Resource Management Systems](#)
- [Creating an Oracle Applications User Account](#)
- [Creating a CRM Resource](#)
- [Assigning an Interaction Center Server Group to a CRM Resource](#)
- [Setting Universal Work Queue User Profile Options](#)

**Assigning an Interaction Center Server Group to a CRM Resource**

Use this procedure to assign roles to a Customer Relationship Management (CRM) resource.

### Prerequisites

- ❑ Review *Oracle CRM Foundation Concepts and Procedures*.
- ❑ Obtain an Oracle Applications user account with access to the CRM Resource Manager responsibility.

### Steps

1. Select the CRM Resource Manager responsibility.
2. In the Navigator window, on the Functions tab, choose **Maintain Resources > Resources**.

The Find window appears.

3. Enter any additional selection criteria.
4. Click **Search**.

The Resource window is displayed.

5. In the Roles tab, assign a call center role.
  - a. In the Role Type field, select **Callcenter**.
  - b. In the Role field, select the role.

The list of available roles is determined by the selected role type.

6. From the **File** menu, choose **Save**.

### Guidelines

In the following example, the interaction center server group called Robert\_Lucent\_QA is assigned to the resource.

**Resource**

Number:  Category:  Transaction Number:

Salesrep Name:  Salesrep Number:

Start Date:  End Date:

Roles | Groups | Teams | Service | **Interaction Center** | Compensation | Receivables | Miscellaneous

Interaction Center:  Scripting Agent Login:

**Telephony Parameters**

Middleware	Parameter	Type	Value
robert_lucent_mw	ACD Data 2	STRING	34141

**Email Parameters**

Email Account	Parameter	Type	Value

**See Also**

- [Creating an Employee in Oracle Human Resource Management Systems](#)
- [Creating an Oracle Applications User Account](#)
- [Creating a CRM Resource](#)
- [Assigning Interaction Center Roles to a CRM Resource](#)
- [Setting Universal Work Queue User Profile Options](#)

**Setting Universal Work Queue User Profile Options**

Follow the steps in the following table to set user profile options for Oracle Universal Work Queue user. The Required column indicates whether a step is required. The Setup Step Description column describes a high-level step and, where applicable, provides a reference to a more detailed topic in this document. The Responsibility column indicates the Oracle Applications user account responsibility required to complete the step. The Navigation column provides the path for navigating to the necessary window.

For a detailed list of Oracle Universal Work Queue profile options, see [Oracle Universal Work Queue User Profile Options](#)

Step Number	Required?	Setup Step Description	Responsibility	Navigation
<input type="checkbox"/> Step 1	Optional	<b>Set access to specific types of media.</b> See: <a href="#">Setting Access to Specific Types of Media</a>	System Administrator	Profiles > System
<input type="checkbox"/> Step 2	Optional	<b>Set access to specific work queues.</b> See: <a href="#">Setting Access to Specific Work Queues</a>	System Administrator	Profiles > System

### See Also

- [Creating an Employee in Oracle Human Resource Management Systems](#)
- [Creating an Oracle Applications User Account](#)
- [Creating a CRM Resource](#)
- [Assigning Interaction Center Roles to a CRM Resource](#)
- [Assigning an Interaction Center Server Group to a CRM Resource](#)

### Setting Access to Specific Types of Media

Use this procedure to grant or restrict user access to specific types of media.

### Prerequisites

- Review *Oracle Applications Systems Administrator's Guide*.
- Obtain an Oracle Applications user account with access to the System Administrator responsibility.

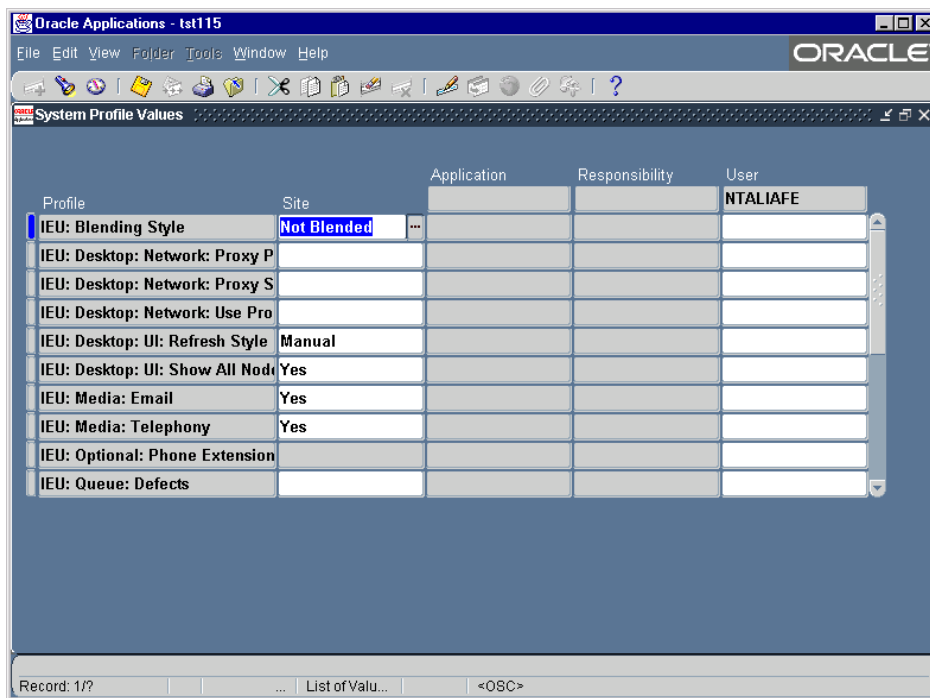
### Steps

1. Select the System Administrator responsibility.
2. In the Navigator window, on the Functions tab, choose **Profiles > System**.  
The Find System Profile Values window appears.
3. Select the User check box.
4. Type the user name in the field adjacent to the User check box (for example, ABCDEF).

5. Select the Profiles with No Values check box.
6. In the Profiles field, type **IEU:Media%**.
7. Click **Find**.  
The System Profiles window appears.
8. In the User column for the particular profile option, select **Yes** to grant access to the media type or select **No** to restrict access to the media type.
9. From the **File** menu, choose **Save**.

### Guidelines

In the following example, all users at this site have access to telephony media and email media by default.



### See Also

- [Setting Access to Specific Work Queues](#)

## Setting Access to Specific Work Queues

Use this procedure to grant or restrict user access to specific work queues.

### Prerequisites

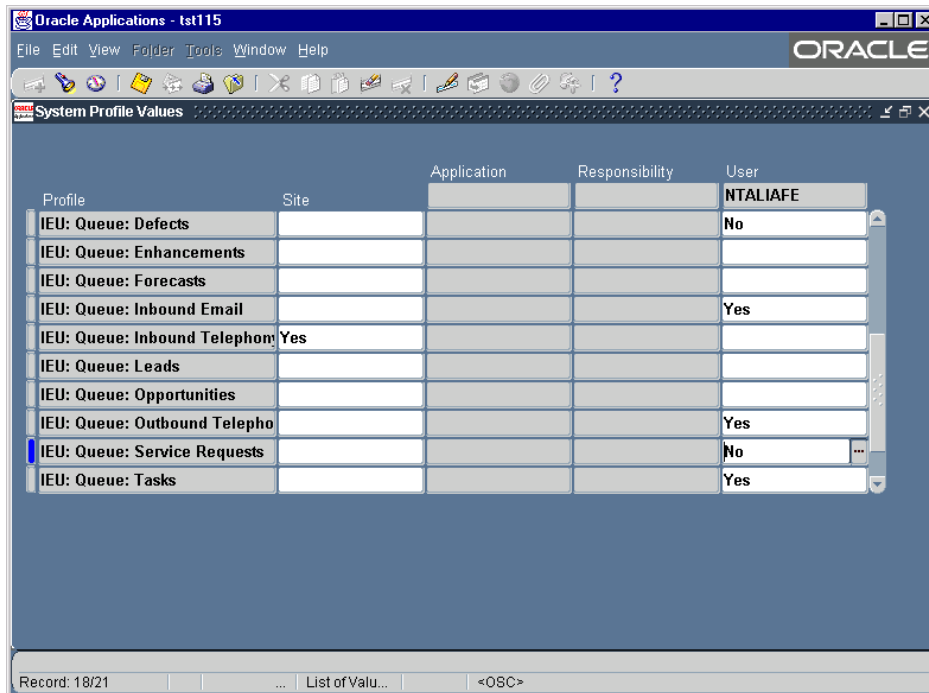
- Review *Oracle Applications Systems Administrator's Guide*.
- Obtain an Oracle Applications user account with access to the System Administrator responsibility.

### Steps

1. Select the System Administrator responsibility.
2. In the Navigator window, on the Functions tab, choose **Profiles > System**.  
The Find System Profile Values window appears.
3. Select the User check box.
4. Type the user name in the field adjacent to the User check box (for example, ABCDEF).
5. Select the Profiles with No Values check box.
6. In the Profiles field, type **IEU:Queue%**.
7. Click **Find**.  
The System Profiles window appears.
8. In the User column for the particular profile option, select **Yes** to grant access to the work queue or select **No** to restrict access to the work queue.
9. From the **File** menu, choose **Save**.

### Guidelines

In the following example, all users at this site have access to all work queues by default. However, this particular user does not have access to the Defects or Server Requests work queues.



**See Also**

- [Setting Access to Specific Types of Media](#)

## Configuring Universal Work Queue Media Screen Pops

Follow the steps in the following table to configure the media screen pop for the Oracle Universal Work Queue desktop. The Required column indicates whether a step is required. The Setup Step Description column describes a high-level step and, where applicable, provides a reference to a more detailed topic in this document. The Responsibility column indicates the Oracle Applications user account responsibility required to complete the step. The Navigation column provides the path for navigating to the necessary window.

Step Number	Required?	Setup Step Description	Responsibility	Navigation
❑ Step 1	Optional	<b>Create classification rules for inbound media items.</b> See: <a href="#">Creating Classification Rules for Media Items</a>	Call Center Admin	Call Center Admin > Classification Administration
❑ Step 2	Optional	<b>Create routing rules for inbound media items.</b> See: <a href="#">Creating Routing Rules for Media Items</a>	Call Center Admin	Call Center Admin > Routing Server Administration
❑ Step 3	Required	<b>Configure media actions by media item classification.</b> See: <a href="#">Configuring Media Actions by Media Item Classification</a>	UWQ Administrator	UWQ Administrator

## Creating Classification Rules for Media Items

For detailed installation procedures, see *Oracle Telephony Manager Concepts and Procedures*.

### See Also

- [Creating Routing Rules for Media Items](#)
- [Configuring Media Actions by Media Item Classification](#)

## Creating Routing Rules for Media Items

For detailed installation procedures, see *Oracle Telephony Manager Concepts and Procedures*.

### See Also

- [Creating Classification Rules for Media Items](#)
- [Configuring Media Actions by Media Item Classification](#)

## Configuring Media Actions by Media Item Classification

Use this procedure to configure the screen pop for media items.

### Prerequisites

- ❑ Obtain an Oracle Applications user account with access to the UWQ Administrator responsibility.

### Steps

1. Select the UWQ Administrator responsibility.
2. In the Navigator window, on the Functions tab, choose **UWQ Administrator**. The Media-Action-Classification Association window appears.
3. In the Media Type field, select the type of media (for example, Inbound Telephony).
4. In the Classification field, type in the name of the media item classification that will trigger the media action (screen pop).

---

---

**Note:** Use a blank field in the Classification column to indicate the default media action for an unclassified media item.

---

---

5. In the Media Action field, select the business application that will be launched when a media item of the specified type with the specified classification is selected from a work queue.
6. From the **File** menu, choose **Save**.

### Guidelines

In the following example, media items with a classification of GoldCustomer will cause a Customer Care screen pop. Media items with a classification of GoldSupport will cause a Service screen pop.

{Media Type }	{Classification ##}	{Media Action #}
{Inbound Telephony	GoldCustomer	{Customer Care Media function proc
{Inbound Telephony	GoldSupport	{Service Requests Media function p

**See Also**

- [Creating Classification Rules for Media Items](#)
- [Creating Routing Rules for Media Items](#)

## Troubleshooting Universal Work Queue

Topics include:

- [Oracle Universal Work Queue Server Parameters](#)
- [Oracle Universal Work Queue Server Command Line Parameters](#)

### Oracle Universal Work Queue Server Parameters

The following table lists and defines the parameter names for which values can be set for UWQ type servers. The following UWQ Server parameters are loaded from the database. The parameters listed below override any command line parameters passed to the UWQ Server. All these parameters are strings when stored in the database.

Parameter	Description and Usage Considerations				
TRACE_LEVEL	The Trace level for writing traces to the Server Trace file LEVEL_ERROR = 0x0001; LEVEL_WARN = 0x0003; LEVEL_INFO = 0x0007; LEVEL_TRACE = 0x000F; LEVEL_ALL = 0xFFFF;				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	N/A	0xFFFF	0	0
TRACE_FILE_NAME	Name of the UWQ Server Trace File				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	String	N/A	N/A	N/A	UWQServer_logs
TRACE_FILE_PATH	Path of the UWQ Server Trace File				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	String	N/A	N/A	N/A	."
LNA_SPILLOVER_FILE	Name of the Logging and Alerting spillover file. The file generated by Logging And Alerting subsystem when the database connection goes down.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	String	N/A	N/A	N/A	spillover/uwq spillover
ENABLE_LOGGING_AND_ALERTING	Enables / Disables the logging and alerting subsystem.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	boolean	N/A	N/A	N/A	false
TIMEOUT_WAIT_TIME	Time after which retries are done in server threads. This applies to all server threads including reconnection threads.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	seconds	65,536	0	10

Parameter	Description and Usage Considerations				
MAX_TIMEOUT_DURATION	The time after which a transaction times out in the UWQ Server. This is used mainly for timing out remote transactions within the UWQ Server. This time out affects any remote transactions done from the client				
	Type	Unit	Max Value	Min Value	Default
	int	seconds	65,536	0	40
MCM_TIMEOUT_DURATION	Time after which OTM/MCM transactions time out. Note: If the MCM_TIMEOUT_DURATION value is left unset, the default value is the value assigned to the MAX_TIMEOUT_DURATION parameter.				
	Type	Unit	Max Value	Min Value	Default
	int	seconds	65,536	0	MAX_TIMEOUT_DURATION
ENABLE_INTERACTION_BLENDED	Deprecated (This is set and used based on data found in the database.)				
	Type	Unit	Max Value	Min Value	Default
	boolean	N/A	N/A	N/A	false
MAX_ACTIVE_DB_CONNECTIONS	Deprecated (this is set in the DBC file)				
	Type	Unit	Max Value	Min Value	Default
	int	N/A	65,536	0	3
USE_AOLJ	Indicates if AOL/J is to be used to connect to the database or the connection has to be obtained using regular JDBC.				
	Type	Unit	Max Value	Min Value	Default
	boolean	N/A	N/A	N/A	true
SESSION_TIMEOUT	Default Session inactivity timeout period (in minutes). This may be overridden during client-side session creation.				
	Type	Unit	Max Value	Min Value	Default
	int	minutes	65,536	0	1
SESSION_CLOSE_DELAY	Time period (in seconds) to delay session removal after a session has been Disconnected due to Client or Network failures. This prevents sessions from having to be completely reconstructed due to a brief network outage.				
	Type	Unit	Max Value	Min Value	Default
	int	seconds	65,536	0	180

Parameter	Description and Usage Considerations				
NETWORK_TRACE_LEVEL	Trace level for the network logs NONE = 0x000; Turns off all events DETAIL = 0x001; Detailed transactions useful for performance monitor INFO = 0x002; Informational e.g., network connection regained MINOR = 0x004; Limited failures e.g., method call failed CRITICAL = 0x008; Catastrophic failure e.g., lost network connection				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	N/A	0xFFF	0	0
NETWORK_TRACE_FILE	The network trace file name.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	String	N/A	N/A	N/A	UWQNetwork_logs
NETWORK_TRACE	Flag indicating if Network Traces should be generated.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	boolean	N/A	N/A	N/A	false
NETWORK_OBJECT_NUMBER	The default number of sessions the Network layer is expected to maintain.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	N/A	65,536	0	200
NETWORK_USER_NUMBER	The default number of remote objects the Network Layer is expected to maintain				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	N/A	65,536	0	200
SERVER_PORT	Port the UWQ Server is registered on. Refer the <b>Note</b> below.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	N/A	65,536	0	80
LOAD_CALC_RATE	The rate at which the load factors on the UWQ Server are calculated.				
	<b>Type</b>	<b>Unit</b>	<b>Max Value</b>	<b>Min Value</b>	<b>Default</b>
	int	seconds	65,536	0	20

Parameter	Description and Usage Considerations				
RECONN_WAIT_TIME	Time between tries to reconnect to remote servers/database etc.				
	Type	Unit	Max Value	Min Value	Default
	int	seconds	65,536	0	60

### Guidelines

Refer to platform specific documentation regarding port usage. The UWQ Server utilizes HTTP communications for access by web-based agents. If the server is to be accessed in this way, it is recommended that the default port 80 be used since many HTTP proxies won't forward HTTP requests to ports other than 80. Obviously, the UWQ Server won't be able to run on the same machine as a web server if port 80 is selected.

On UNIX machines any port below 1024 cannot be accessed by a process which is non root owned.

## Oracle Universal Work Queue Server Command Line Parameters

The following table lists and defines the parameters that can be set via the command line usage:

```
java oracle.apps.ieu.server.UWQServerLauncher [option <value>] [...]
```

Parameters	Description and Usage Considerations				
- console	Enables display of the UWQ Server GUI control panel and console trace.				
	Value	Min Length	Max Length	Required - See: Note 1	Default
	N/A	N/A	N/A	NO	disabled
- port	Specifies the Port number the server will listen on. See: Note 2				
	Value	Min Length	Max Length	Required - See: Note 1	Default
	Number	1	5	NO	80

Parameters	Description and Usage Considerations				
- name	The name the UWQ Server will utilize to query itself in the database. See: Note 3				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	String	1	6,6555	YES	N/A
- dbc	The file name pre-pended by the file path where the .dbc file is located. See: Note 4				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	String	1	255 See: Note 5	YES	N/A

Parameters	Description and Usage Considerations				
- trace_path	The path name identifying the location of the trace file.				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	String	1	255 See: Note 5	NO	""
- trace_file_name	The name of the trace file containing debug information.				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	String	1	255 See: Note 5	NO	null (Output will only go to stdout.)
- max_num_threads	Defines the maximum number of threads which may be allocated to the UWQ Server's internal thread pool. See: Note 6				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	Number	1	10	NO	50
- min_num_threads	Defines the minimum number of threads which will be allocated to UWQ Server's internal thread pool. See: Note 6				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	Number	1	10	NO	5
- trace_level_debug	Turns on detailed tracing of all server activity. See: Note 7				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	N/A	N/A	N/A	NO	disabled

Parameters	Description and Usage Considerations				
- trace_level_warn	Turns on tracing of all server warnings and errors. See: Note 7				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	N/A	N/A	N/A	NO	disabled
- trace_level_info	Turns on tracing of all server events, warnings and errors. See: Note 7				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	N/A	N/A	N/A	NO	disabled
- trace_level_error	Turns on tracing of only server errors. See: Note 7				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	N/A	N/A	N/A	NO	disabled
- command	Turns on display of the UWQ Command Prompt. This allows acceptance of control commands from the command line e.g., Shutdown.				
	<b>Value</b>	<b>Min Length</b>	<b>Max Length</b>	<b>Required - See: Note 1</b>	<b>Default</b>
	N/A	N/A	N/A	NO	disabled

**Note 1:** All parameters other than the required parameters and *-console* may be overridden via database entries.

**Note 2:** Refer to platform specific documentation regarding port usage. The UWQ Server utilizes HTTP communications for access by web-based agents. If the server is to be accessed in this way, it is recommended that the default port 80 be used since many HTTP proxies won't forward HTTP requests to ports other than 80. Obviously, the UWQ Server won't be able to run on the same machine as a web server if port 80 is selected.

**Note 3:** The UWQ Server name must be unique amongst all UWQ Servers across the deployment. If the UWQ Server detects another instance with the same name already running it will wait for the other instance to shutdown before completing initialization.

**Note 4:** Refer to the Universal Installer documentation regarding creation/format of the .dbc file.

**Note 5:** Refer to platform specific documentation regarding maximum allowable file path/name size.

**Note 6:** The internal UWQ Server Thread Pool does not control threads allocated for remote communications. Thus, this by no means indicates the maximum number of threads which will be utilized by the UWQ Server. Also, it is recommended that this not be set as a command line parameter as the UWQ Server will season the value in the database according to levels of demand.

**Note 7:** Only one trace level parameter may be specified. If multiple trace level parameters are specified the parameter appearing first will be enforced and the others following will be ignored. **WARNING!:** The trace that is produced can be very verbose and affect performance.

## Oracle Universal Work Queue User Profile Options

The tables in this section list and define the UWQ user profile options. Profile options include:

- [IEU: Queue: Web Collaboration](#)
- [IEU: Queue: Web Callback](#)
- [IEU: Queue: Outbound Telephony](#)
- [IEU: Queue: Inbound Telephony](#)
- [IEU: Queue: Inbound Email](#)
- [IEU: Optional: Phone Extension](#)
- [IEU: Media: Telephony](#)
- [IEU: Media: Email](#)
- [IEU: CLI: NET: Use Proxy](#)
- [IEU: Blending Style](#)

**Important:** The spaces in the names of the User Profile Option listed below are important!

The special notes listed below are referenced in the tables in this section.

### Special Note 1

The default queue determination process is dynamic by nature, so we cannot simply say the default is Y or N.

When the user logs in, we see what Interaction Center they're in (a.k.a. Server Group). This is set in the CRM Resource configuration form, under the Interaction Center tab. We know which types of servers support which types of media by using other (internal) configuration tables.

Based on this lookup, the user is deemed to be "eligible" to work on any Queue type that the servers in his group can support. Therefore, if only OTM where in his group, he would be eligible to work on: Inbound Telephony, Inbound Email, Web Callbacks.

If this processing is not desired, then our determination process can be affected by setting the Queue access to N for any that you don't want. This can be done for the whole site, a specific user, etc., per User Profile functionality.

**Special Note 2**

Normally, the client plug-ins are loaded based on the media types each user is eligible to work on. The mentality being that there is no sense in launching Softphone, for example, if the user cannot even work on any telephony work.

Just in case there are situations in which we need a particular client plug-in loaded irregardless of our determination, these overrides were provided.

If any override is set to Y, then we'll load it even if we don't think we need to. Setting it to N is ignored.

## IEU: Queue: Web Collaboration

This option determines if a user can work on Web Collaboration queues.

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**Note:** This option is reserved for future use.

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Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that user can work on Web Collaboration queues.					
N	Specifies that user can not work on Web Collaboration queues.					
NULL	see Special Note 1					

## IEU: Queue: Web Callback

This option determines if a user can work on Web Callback queues.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that user can work on Web Callback queues.					
N	Specifies that user can not work on Web Callback queues.					
NULL	see Special Note 1					

## IEU: Queue: Outbound Telephony

This option determines if a user can work on Outbound Telephony queues.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that user can work on Outbound Telephony queues.					
N	Specifies that user can not work on Outbound Telephony queues.					
NULL	see Special Note 1					

## IEU: Queue: Inbound Telephony

This option determines if a user can work on Inbound Telephony queues.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that user can work on Inbound Telephony queues.					
N	Specifies that user can not work on Inbound Telephony queues.					
NULL	see Special Note 1					

## IEU: Queue: Inbound Email

This option determines if a user can work on Inbound Email queues.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that user can work on Inbound Email queues.					
N	Specifies that user can not work on Inbound Email queues.					
NULL	see Special Note 1					

## IEU: Optional: Phone Extension

This option determines if a user enters a phone extension during UWQ logon.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X			
Setting	Description and Usage Considerations					
Y	Specifies that user enters phone extension during UWQ logon.					
N	Specifies that user avoids entering phone extension during UWQ logon.					
NULL	see Special Note 2					

**IEU: Media: Telephony**

This option determines whether the client-side telephony plug-in (i.e. Softphone) is forcefully launched.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that the client-side telephony plug-in is forcefully launched.					
N	Specifies that the client-side telephony plug-in is not forcefully launched.					
NULL	see Special Note 1					

**IEU: Media: Email**

This option determines whether the client-side email plug-in (i.e., eMC client) is forcefully launched.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that the client-side email plug-in is forcefully launched.					
N	Specifies that the client-side email plug-in is not forcefully launched.					
NULL	see Special Note 1					

**IEU: CLI: NET: Use Proxy**

This option determines whether the client network layer attempts to use the system's proxy server, or a direct connection to the UWQ server.

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Y	Specifies that the client network layer attempts to use the system's proxy server, or a direct connection to the UWQ server.					
N	Specifies that the client network layer does not attempt to use the system's proxy server, or a direct connection to the UWQ server.					
NULL	Specifies that the client network layer does not attempt to use the system's proxy server, or a direct connection to the UWQ server.					

**IEU: Blending Style**

This option determines the Interaction Blending style for a user (i.e., forced, non-blended).

Required	User can		Admin Setting Levels			
	View	Update	User	Resp	App	Site
	X		X	X	X	X
Setting	Description and Usage Considerations					
Non-Blended	Specifies that the Interaction Blending style for a user is non-blended.					
Forced Blended	Specifies that the Interaction Blending style for a user is forced blended.					
NULL	Specifies that the Interaction Blending style for a user is non-blended.					

# Configuring and Testing Integration Points

## Overview

Oracle Universal Work Queue facilitates an interaction center by serving as a gateway for the delivery and presentation of business and customer related data and work from Oracle CRM business applications, which are considered "work providers".

They include:

- Oracle TeleService
- Oracle TeleSales

Media work items are presented to Oracle Universal Work Queue through entities known as "media providers".

They are:

- Inbound Telephony
- Outbound Telephony
- E-Mail
- Web Callback

Through Oracle Universal Work Queue's integration with Oracle Interaction Blending, media work items are dynamically presented to an agent based on established business rules, service levels, and agent-specific skills. For example, an agent capable of speaking multiple languages whom is assigned to several campaigns would be presented work based on that skill set. If the same agent were also skilled in handling inbound calls, the work would be delivered to the agent based on meeting customer and business needs and requirements.

Access to tasks is provided through Oracle Universal Work Queue's common view. Tasks, as they relate to the Oracle CRM business application from which they originate, are agent-specific in their assignment.

The following list is a representative sample of tasks that can be managed and worked through Oracle Universal Work Queue:

- To-Do's
- Call Backs
- Leads

- Opportunities
- Quotes
- Personal Tasks

Customer-agent interactions that occur as a result of the work performed through Oracle Universal Work Queue are tracked and reported to the Oracle CRM business application. These interactions are available for viewing and statistical reporting within the respective Oracle CRM business application.

### **Testing Integration Points**

The integration points listed below should be tested depending on your deployment configuration.

UWQ Server integration points include:

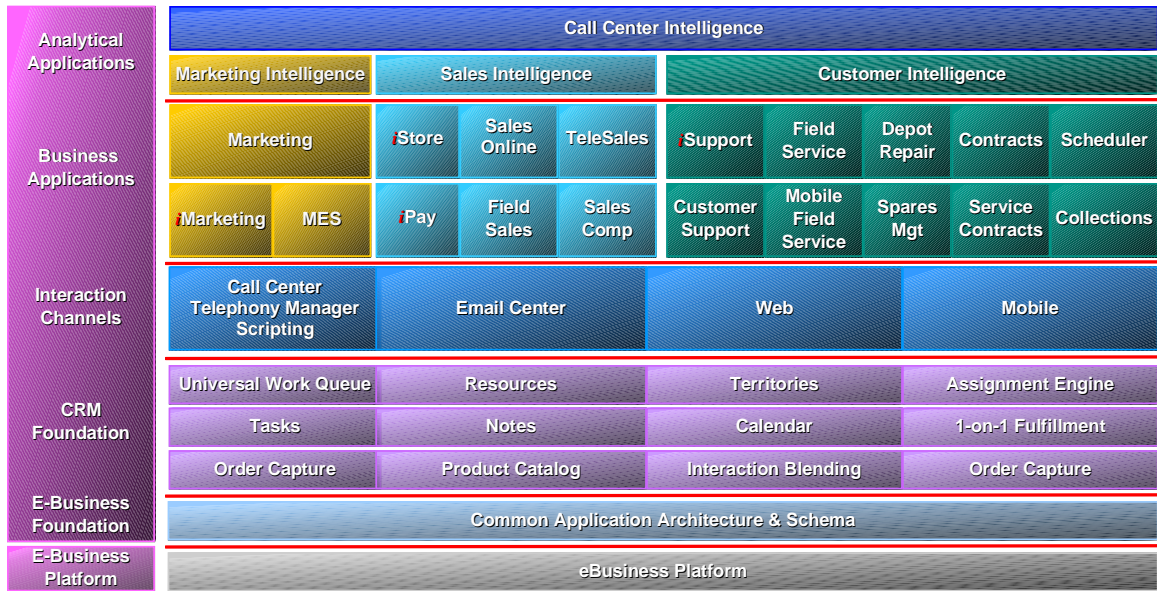
- UWQ integration with Interaction Blending - Inbound Call
- UWQ integration with Interaction Blending - Outbound Call
- UWQ integration with Interaction Blending - Inbound E-mail
- UWQ Server integration with MCM (OTM) - Inbound Call
- UWQ Server integration with MCM (OTM) - Inbound E-mail
- Integration with Outbound Telephony Preview Dial
- Integration with Outbound Telephony Progressive Dial
- Integration with Outbound Telephony Predictive Dial

UWQ Client integration points include:

- UWQ Client integration with Oracle Telesales (OTS) - Outbound Telephony
- UWQ Client integration with Multi-Channel Manager (MCM or OTM) softphone - Inbound Telephony
- UWQ Client integration with e-Mail client
- UWQ Client integration with Interaction History (IH)

## **Workflows in Oracle Universal Work Queue**

Oracle Universal Work Queue, although considered part of the Call Center family of products, is positioned in the overall CRM 11i footprint as part of the CRM Foundation.



There are no predefined workflows in Oracle Universal Work Queue.

## Converting and Inputting Existing Data

There is no converting or inputting of existing data into Oracle Universal Work Queue 11i.

## Considerations for Future Upgrade Paths

UWQ was designed to allow future extensibility on the desktop and the server. The desktop can be extended by adding new desktop plug-ins (media enablers) and the server can be extended by adding new media types (media providers). In fact, by design, the UWQ desktop has no bindings to any applications using it, so new applications can easily use UWQ as well.

## Glossary

**Business Application** A reference to the CRM business application residing on agent's desktop, i.e. TeleSales or Customer Care.

**Media Controller** A reference to the media "control" application residing on agent's desktop which controls a specific media service, i.e. Soft Phone, Email Client.

**Media Item** Represents specific media work items, such as inbound calls, outbound calls, or e-mails.

**Media Provider** A reference to media-based work systems such as telephony switches (ACDs), automated outbound dialing systems, email interaction systems (eMC), etc.

**Task Management** Refers to the monitoring and managing of tasks

**Tasks** Refers to work items that originate in Oracle CRM business applications and are specifically assigned to an agent. An example of a task is a call back.

**Work Item** Represents an agent-specific item, assigned in the Oracle CRM business application and presented in Oracle Universal Work Queue for processing. There are four types of work items, media, tasks, service requests, and defects.

**Work Provider** Represents any Oracle CRM business application from which agent work originates.