Offline Ticket Entry V2 for CounterPoint SQL

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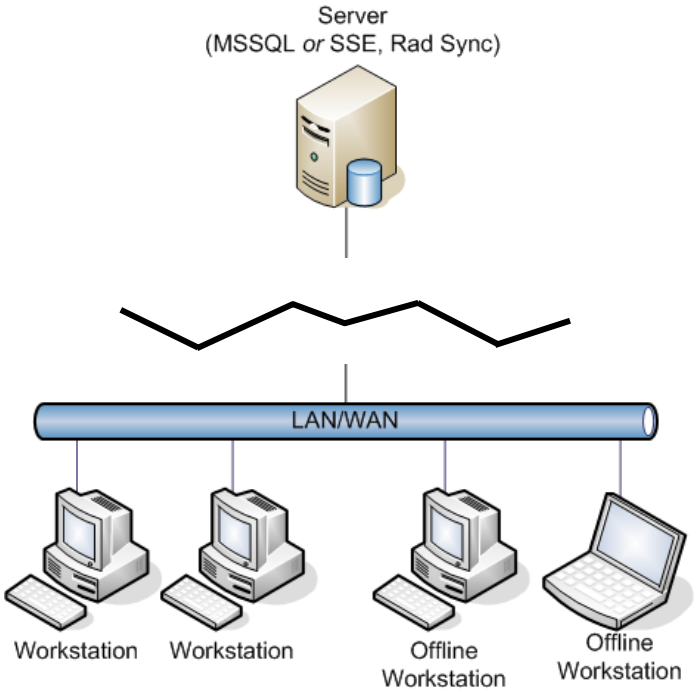
What is Offline V2?

- Provides ability to run CounterPoint SQL when workstation cannot connect to database server

- Useful for network outages, power failures, scheduled server maintenance, sidewalk sales, trade shows



Available Functions When Running Offline

Offline V2 allows the following:

- Activate / count drawers, as well as Cash Drop and Cash Loan tickets
- Enter new tickets / pay-in / pay outs / pay-on-account (no apply)
- Create new orders / layaways / quotes / holds
- Enter new customers
- Issue and redeem gift certificates and store credits
- View items / serial numbers / customers / vendors
- Print credit card pre-settlement list
- Print X-tape / quotes / holds
- Configure Point of Sale devices
- Update workstation preferences
- Update of configuration changes from server
- Hold/recall

Offline V2 does not allow the following:

- Update of quantity committed / available until tickets are processed at Server
- Update of customer balance or loyalty points until tickets are processed at Server
- Edit customers / items / vendors
- Process orders / layaways / quotes / holds
- Void completed tickets
- Change stocking or pricing location for ticket or line item
- Print Orders or Layaways Report
- Reconcile drawers
- Clock in / out
- Change user preferences

Differences Between Offline Ticket Entry & Offline V2

Offline Ticket Entry ("V1")	Offline V2
Database synchronized using **DXRE**	Database synchronized using **RadSync**
Offline database must be **reactivated** for software upgrades or schema changes	**Rebuild** (replace) offline database for software upgrades or schema changes
All data changes generated offline are sent to replication partners	**Only tickets and new orders, layaways, holds, and quotes,** as well as **new customers** are sent to the site server
Qty changes updated offline, requiring "delta" handling	No changes to **Qty** until updates received from server
Sales history optionally available offline, which increases database size and volume of data	**Sales history** not available offline
Drawers can be activated, counted, and reconciled offline	**Drawer** can be activated and counted; cash drops and cash loans can be done. Reconciliation not available offline
Can create new **orders, layaways, holds, and quotes**, as well as process existing ones	Can only create new **orders, layaways, holds, and quotes**. Cannot process existing ones.
Orders, Layaways, Open Customer-specific Purchases reports are available from **Point of Sale** / **Reports** menu	Only Holds, Quotes, and X-Tape reports are available from **Point of Sale** / **Reports** menu
User preferences can be changed while offline	**User preferences** cannot be changed while offline
Can change **ship-to or price-from location** for tickets or items	Cannot change **ship-to or price-from location** for tickets or items
Can apply or auto-apply **pay-on-account tickets**	Can enter **pay-on-account tickets**, but cannot apply them (left "Open")
Can **void** completed tickets	Cannot **void** completed tickets

Offline V2 Technology

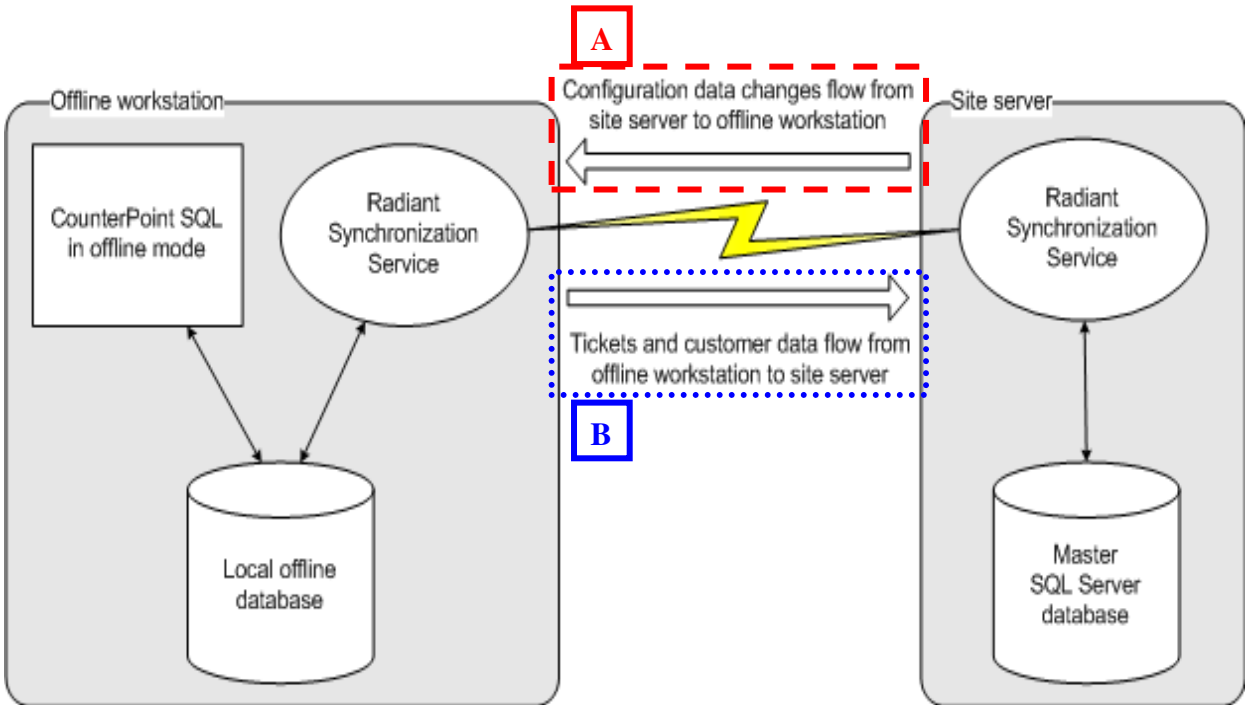
All data flows in XML files:

A. Configuration data (items, inventory records, tax information, price rules, etc.) flows from the Site Server to the Offline Workstation.

B. Ticket and Customer data (tickets, new orders, new layaways, new quotes, new holds, gift certificates, store credits, new customers) flow from the Offline Workstation to the Site Server.

The **Radiant Synchronization Service** ("RadSync") runs on both the Site Server and each Offline Workstation to:

- Produce the XML files of data that needs to be sent
- Download configuration data from the server
- Upload ticket/customer data from the offline workstation



What RadSync Does

Performs data extraction and processing at server and offline workstations

ON AN OFFLINE WORKSTATION:

Contacts the server every 1 MINUTE

"Heartbeat"	if no contact in 10+ minutes, server considers workstation to be offline
Downloads	XML packages containing configuration data and posted tickets to delete
Uploads	XML packages containing new tickets and new customers

Every 15 MINUTES

Creates XML package	• extracts new tickets and customers • 10 tickets per package/file • 1 package every 15 minutes

ON A SITE SERVER:

Every 15 MINUTES

Creates XML package	• new/updated configuration data • newly-posted tickets
Processes data	• tickets in XML packages received from offline workstations, in order received

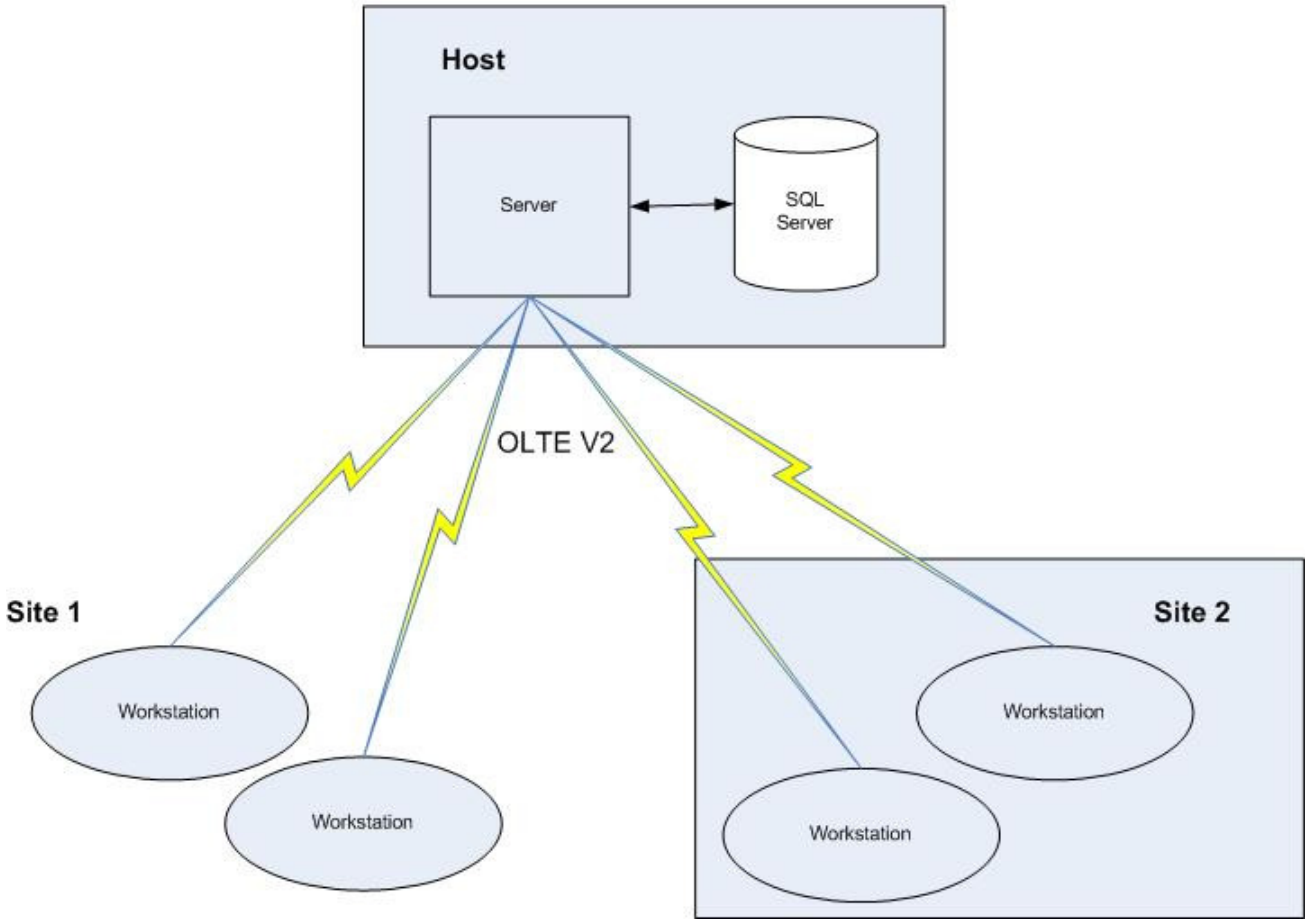
ON OFFLINE WORKSTATIONS AND SITE SERVERS:

Every 24 hours

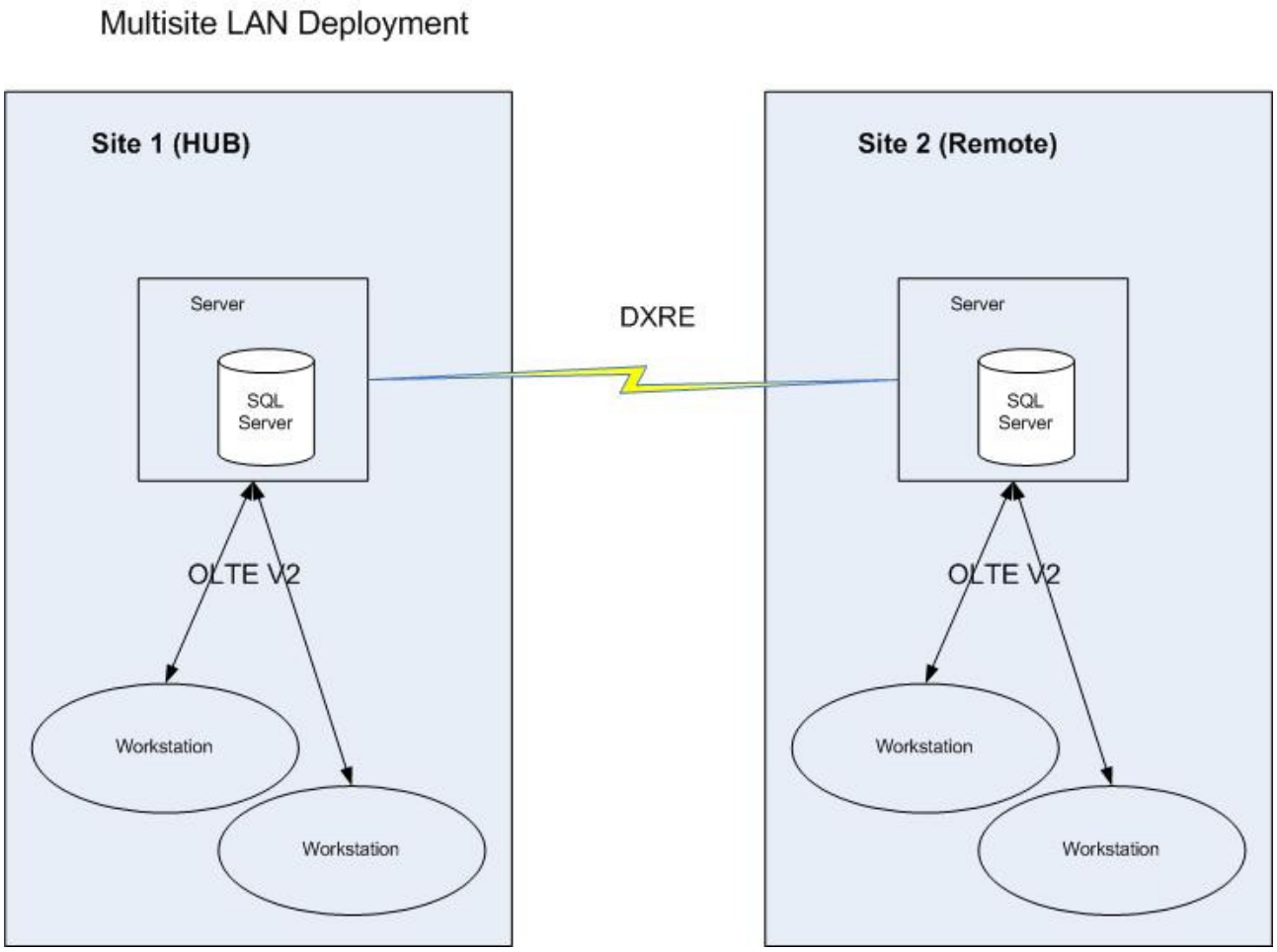
Purges XML packages	• 15 days old or older • sent (Sync/Outbox) and received (Sync/Inbox)

Example Offline V2 Configuration: WAN (Terminal Services)

Wan Deployment



Example Offline V2 Configuration: Multi-Site



Hardware and Software Requirements For Offline V2

Site Server

Function	Hardware and Software Requirements
CounterPoint SQL server CounterPoint SQL Options: Offline V2 Ticket Entry plus others, as desired	• Windows 2003 Server with SP1 or Windows XP Pro with SP2* • 2 GHz Pentium 4 or better • 2 GB memory • Internet connection; Internet Explorer 6.0 or later • MSSQL 2005: Standard, Enterprise or Workgroup Edition, enabled for SQL authentication • Named Pipes and TCP/IP with static IP/network address or DNS-resolvable host name • Disable Shared Memory protocol • Clock synchronization software • Open port 1968
If missing, installed by **CPSQLPrereqs.exe**	• Microsoft .NET Framework 3.0 • SQL Native Client • SQL Server Management Objects • SQL XML 4 • SSE 2005 (optional install)

Workstation (Offline)

Function	Hardware and Software Requirements
CounterPoint SQL workstation that acts as "server" when disconnected from normal CounterPoint SQL server	• Windows XP Pro with SP2 • 1.6 GHz Pentium M or better • 1 GB memory • Internet connection; Internet Explorer 6.0 or later • MDAC 2.8 or later • MSSQL or SSE 2005, as default instance, enabled for SQL authentication • Clock synchronization software • Open port 1968
If present, uninstalled by **CPSQLPrereqs.exe**	• MSDE • PDRE/DXRE
If missing, installed by **CPSQLPrereqs.exe**	• Microsoft .NET Framework 3.0 • SQL Native Client • SQL Server Management Objects • SQL XML 4 • SSE 2005 (optional install)

* For XP Pro, if network is configured as a workgroup (rather than as a domain), enable Windows networking and disable Simple File Sharing.

CounterPoint Registration

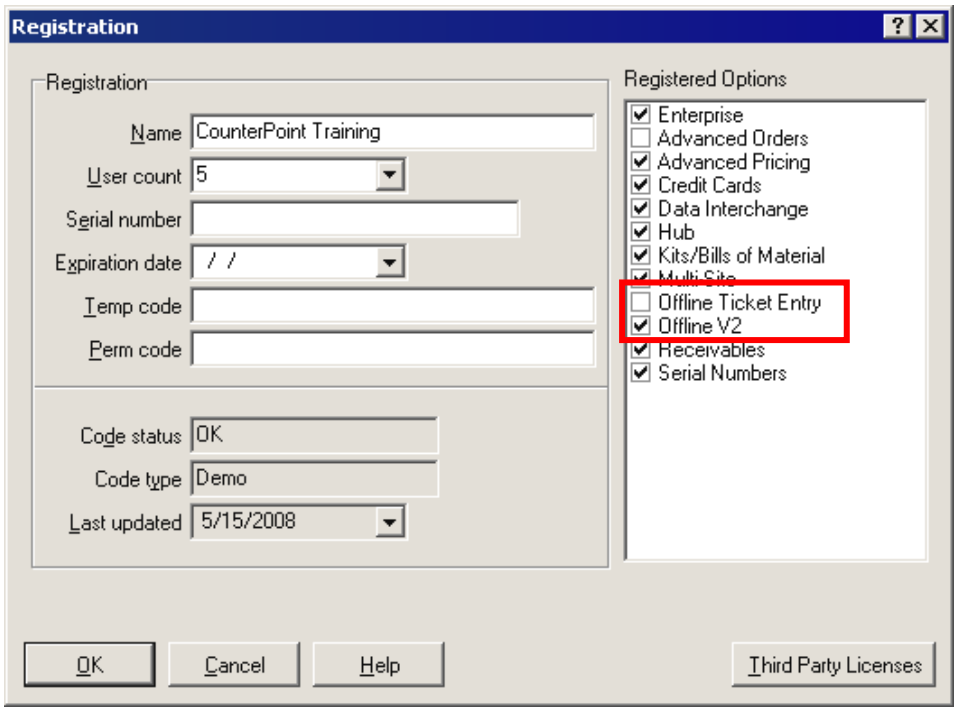
Setup / System / Registration

Two different options

Offline Ticket Entry

and

Offline V2



New Orders

All new orders are assumed Offline V2 unless specifically requested otherwise.

Existing, but not implemented

To switch from Offline Ticket Entry to Offline V2, partners can place a configuration change order online.

Existing and Implemented

Partner must talk to Radiant Account Manager and obtain a “Warranty of Non-Possession Form” with the customer’s signature.

To change 5-10 licenses, entering individual orders online may be faster than emailing Account Manager.

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Files for Installing Offline V2

- All files delivered on product DVD (V8.3.8)
- Delivered in April 21 '08 service pack (V8.3.7): download CPSQLPrereqs.exe from CounterPoint website
- Files copied to <top-level CP directory> \ OfflineFiles when service pack or CounterPoint is installed on server

File Name	Function
CPSQLPrereqs.exe V8.3.8 Copy from DVD to local drive or download from website V8.3.7 Download from website	Run on servers and workstations Installs prerequisites Microsoft .Net Framework 3.0 SQL Native Client SQL Server Management Objects SQL XML 4 SSE 2005 (if SQL 2005 not already present) On workstations only, uninstalls if present DXRE or PDRE MSDE 2000
RadSyncInstall.exe	Run on servers and workstations Installs Radiant Synchronization Services On server, gives option to provision On workstation, launches registration of offline workstation to server and gives option to initialize offline database
OfflineInstall.exe	Run only on workstations Installs CounterPoint for use when running offline Automatically launches RadSyncInstall.exe
OfflineUpdateTopLevel.exe	Manually run to copy CounterPoint top-level files from server to offline workstation's CPOffline top-level directory
CPSQLSPOffline.exe Delivered with CP service pack	When CP service pack installs on workstation, runs this automatically to copy changed files from server's top-level directories to offline workstations' CPOffline directories

Prerequisites Installation on Server

Before Installing Prerequisites

- Download and install the latest CounterPoint SQL service pack (V8.3.7)
- Download CPSQLPrereqs.exe from CounterPoint website or copy from CounterPoint V8.3.8 DVD to local drive
- Upgrade to MSSQL 2005 or SSE and convert existing CP database to SQL 2005 format
- Enable remote connections using both TCP/IP and Named Pipes in SQL Server Surface Area Configuration function
- Disable Shared Memory in SQL Server Configuration Manager
- Stop and restart SQL Server service

Install Prerequisites

- On same server as CounterPoint, login as Windows administrative user and run **CPSQLPrereqs.exe**
- Optional install of SSE if no MSSQL 2005 already installed
- Takes about 15 minutes if all components are installed
- Reboot server when finished

Exercise 1: Preparing the Server

In class, you are a member of a team that includes up to four students. Each team has been provided three computers.

The three systems are already configured for Multi-Site and running as a replication network.

The FirstSite system has its own monitor, mouse, and keyboard. While this system is the “Hub” of the Multi-Site configuration, it will **not** be involved in your Offline V2 exercises and you can ignore it.

The other two systems, Remote1 and Offline1, share one monitor, mouse, and keyboard with a switch that will allow you to control which computer is active on the monitor and mouse/keyboard.

Name	Role
REMOTE1	Site Server
OFFLINE1	Workstation connected to Remote1 that you will configure for use as an offline workstation

The Windows login for each of these systems is **ADMIN** and a password of **password**.

In this exercise, you will perform these steps:

- verify hardware requirements
- copy CPSQLPrereqs.exe to the local drive of the REMOTE1 server
- ensure that remote connections on REMOTE1 allow for TCP/IP and Named Pipes
- ensure that Shared Memory protocol is disabled
- verify that the SQL Server service is running on REMOTE1
- run CPSQLPrereqs.exe

Refer to Exercise 1 in the Offline V2 Exercise Handbook for details.

When finished with the exercise, return to this manual.

CounterPoint Installation on Server

Install and Deploy Multi-Site, if using

- Create CP database, build data, and activate database
- Registration.hub that's deployed needs to have Offline V2 Option enabled
- Edit connection string to enter and save SQL user's password
- Stop replication before RadSync install ("**pdre stop**" at command prompt)

If not Multi-Site, Install CounterPoint and Build Company Data

- Install CounterPoint and service pack on server and one workstation
- Registration.ini needs to have Offline V2 Option enabled
- Workstation needs CounterPoint utilities
- Build data (users, items, stores, stations, etc.)
- If using SQL authentication, SQL user's password must be entered and saved in company's connection string

CounterPoint SQL Service Packs

Offline V2 Environment

- CPSQLSP.exe contains **CPSQLSPOffline.exe**
- CPSQLSPOffline.exe = cumulative “mini”-service pack with just updated files for an offline system
- After applying service pack to server, CPSQLSPOffline.exe located in OfflineFiles directory on server

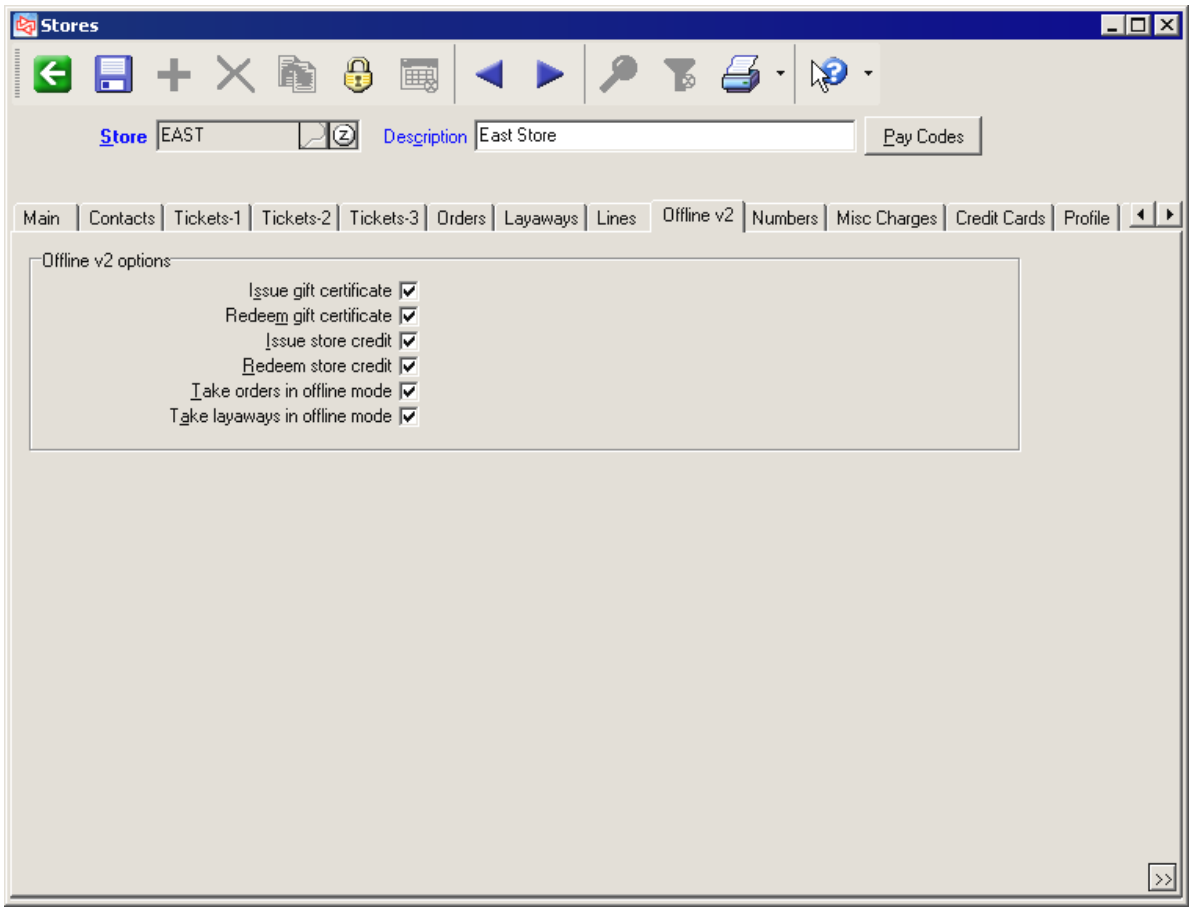
  On WAN:
  - copy CPSQLSPOffline.exe to OfflineFiles directory on locally-accessible system
  - copy CounterPoint.ini to top-level directory on locally-accessible system
- CPSQLSPOffline.exe automatically applied to offline workstation when someone starts CounterPoint on workstation while it is online with server

Store Settings for Offline V2

Select **Setup** / **Point of Sale** / **Stores**

- Enable special activities for use in offline
  - Gift certificates: issue or redeem
  - Store credits: issue or redeem
  - New orders
  - New layaways

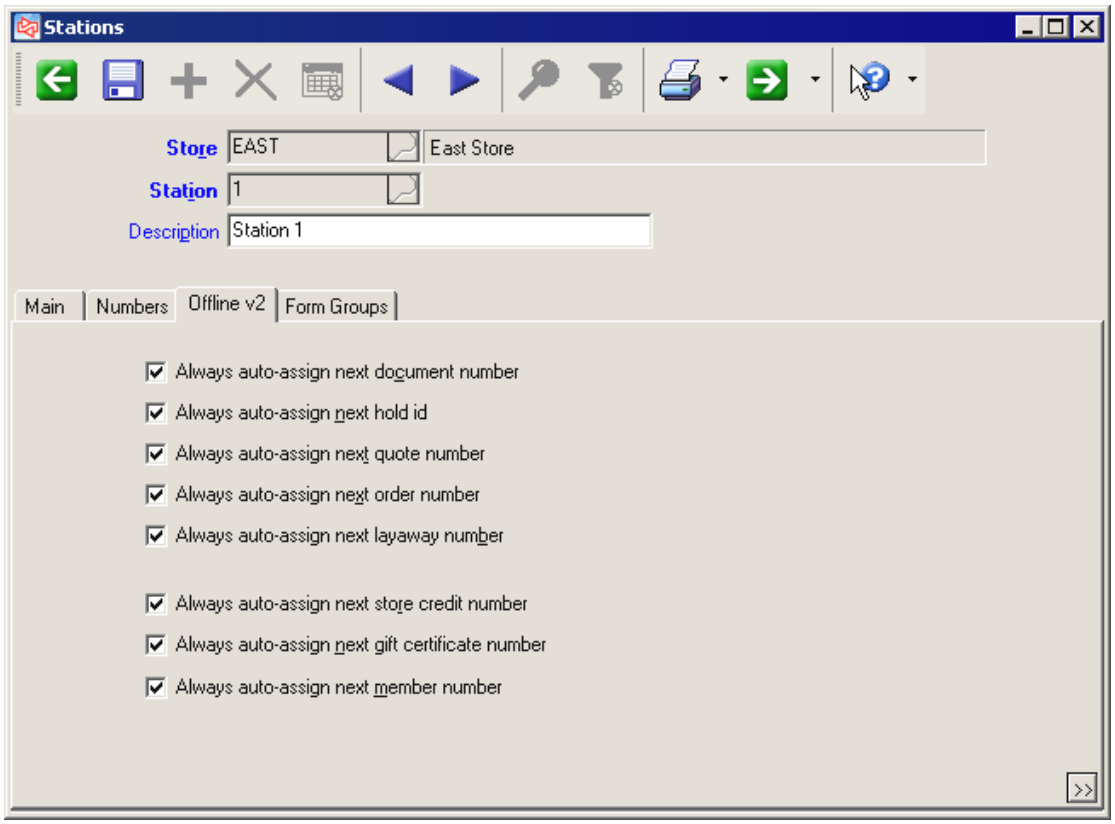
- Activities carry risk if changes occur to same document at different offline workstations or stores



Station Settings for Offline V2

Select **Setup** / **Point of Sale** / **Stations**

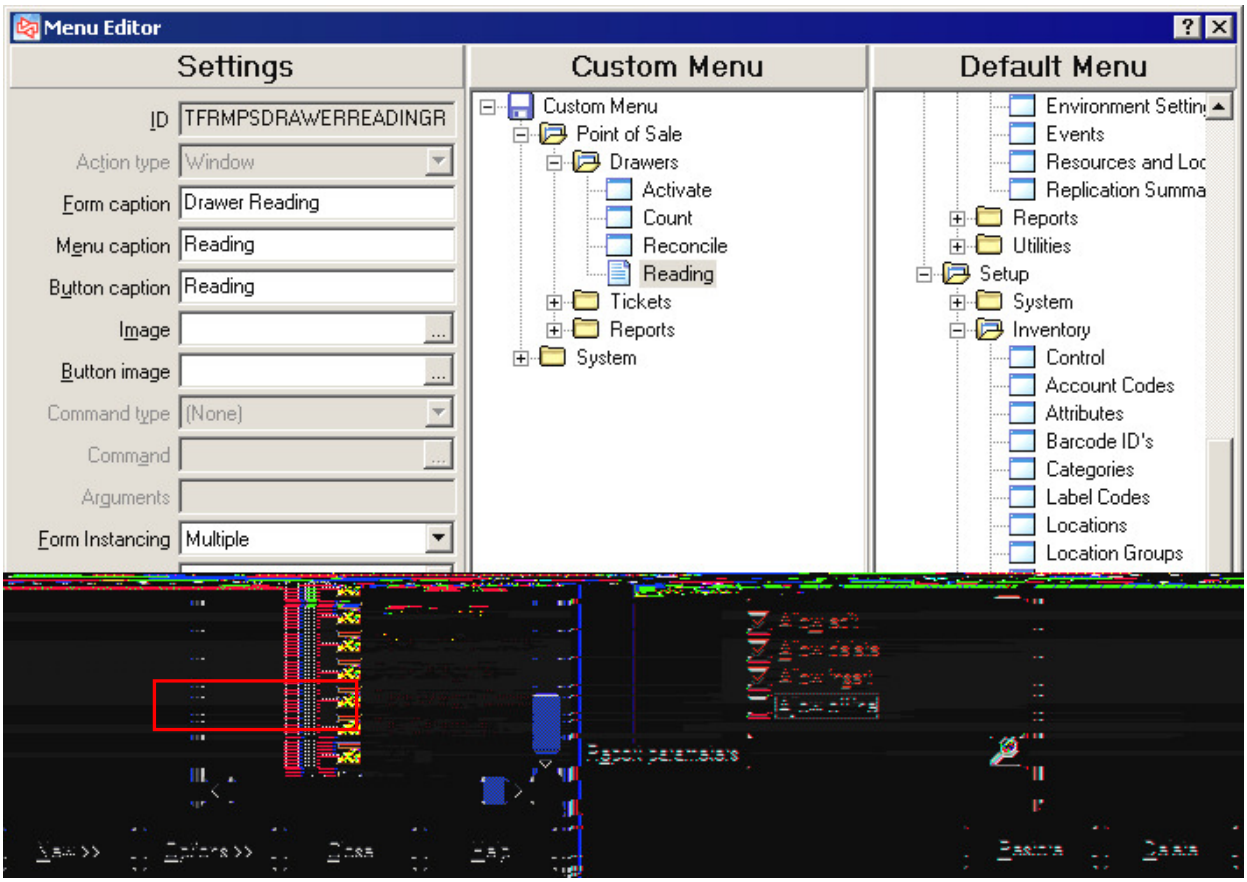
- Force numbers to be auto-assigned to various documents while in offline
- Avoids potential of data conflicts during synchronization with server
- Prevents users from manually entering document numbers



Menu Code Settings for Offline V2

Select **Setup** / **System** / **Menu Codes**

- Prevent access to menu selections while in Offline mode
- Provide access to menu selections for Custom view forms, Custom reports, and External programs



Exercise 2: Deploy/Install CounterPoint SQL and Build CounterPoint Data

In this exercise, you will

- update the CounterPoint registration for the REMOTE1 server,
- complete the data setup for the EAST store and stations to allow special activities while offline
- force document numbers to be auto-assigned by a station while offline
- save the SQL user's password in the database connection string used in CounterPoint

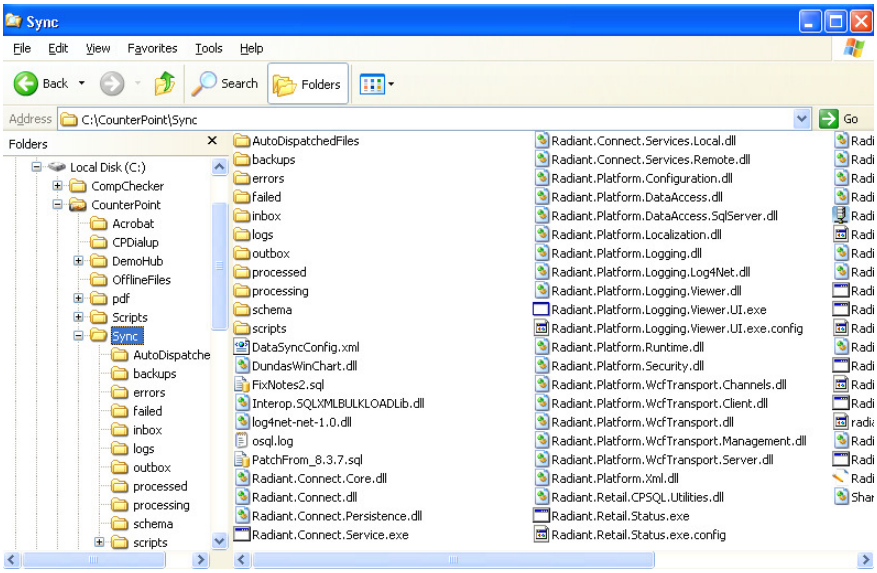
Perform Exercise 2 in the Offline V2 Exercise Handbook.

Radiant Synchronization Service Installation on Server

Install Radiant Synchronization Services ("RadSync")

- Open Port 1968 on server (see Appendix A to configure for different port)
- Run **RadSyncInstall.exe**

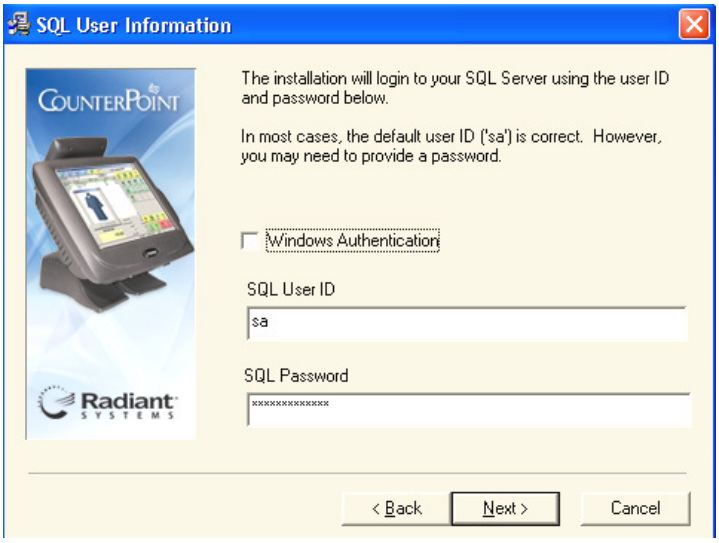
Adds SYNC directory below top-level CounterPoint



- Requests SQL user ID and password

  (V8.3.8) sys_admin (or db_creator)

  (V8.3.7) db_owner (or db_datareader, db_datawriter, & db_ddladmin) AND sys_admin (or db_creator)

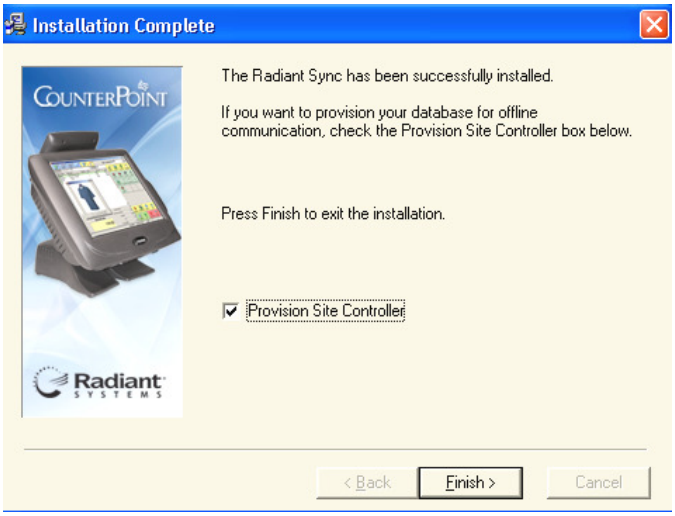


- Starts Radiant Synchronization service

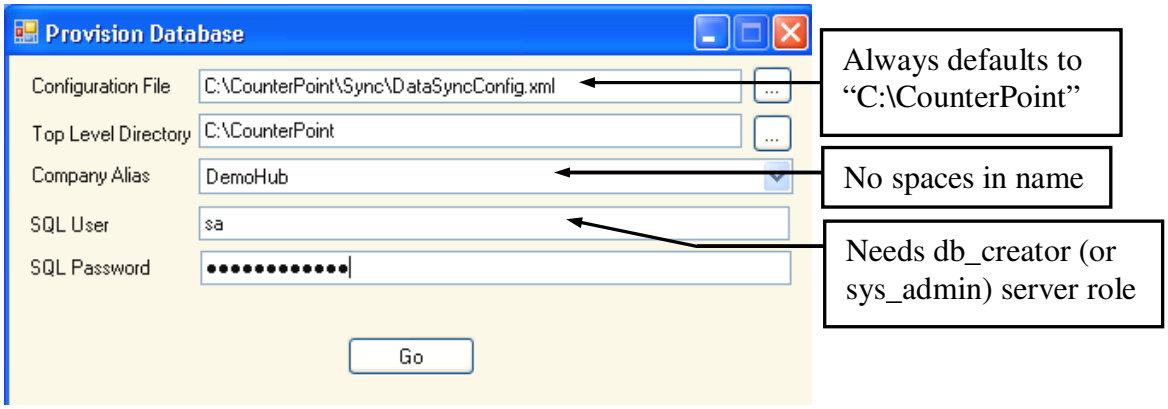
Provisioning the Server's Database

Provision the Database for Offline Use

- At end of RadSync install, **Provision Site Controller** check box to start provision



- Can also provision using Radiant Management Console or by running Radiant.Retail.Sync.ProvisionDB.exe in SYNC directory



- Takes 10-15 minutes, regardless of database size

What Happens During Provisioning

Generates in **CounterPoint** / **Sync** / **Scripts** on server

- **BuildDatabase.sql**
  - ✓ Contains schema of server's database
  - ✓ Used when offline workstation initializes its database
  - ✓ Errors caused by incorrect SQL syntax recorded in **BuildDatabase_Exceptions.sql**
- **Scripts in POS directory**
  - ✓ Applied to offline workstation's database during initialize
  - ✓ Triggers to track ticket insertions, deletions, updates
    - TR_RS_xxx_D
    - TR_RS_xxx_I
    - TR_RS_xxx_U
  - ✓ Stored procedures to extract tickets and customers and write to XML files
    - USP_RS_EXTRACT_xxx
- **Scripts in SS directory**
  - ✓ Applied to server's database during provisioning
  - ✓ Triggers to track configuration data changes and deletions, and posted tickets
    - TR_RS_xxx_D
    - TR_RS_xxx_U
  - ✓ Stored procedures to extract changes and write to XML files
    - USP_RS_APPLYDELETES_xxx
    - USP_RS_EXTRACT_xxx
    - USP_RS_EXTRACTDELETES_xxx
    - USP_RS_PERSIST_xxx
    - USP_RS_PROCESS_TKT

Exercise 3: Install Radiant Synchronization Server and Provision Database

In this exercise, you will

- open the port to allow the Radiant Synchronization service to communicate with your offline workstations
- install the Radiant Synchronization service on the server
- provision the server's database

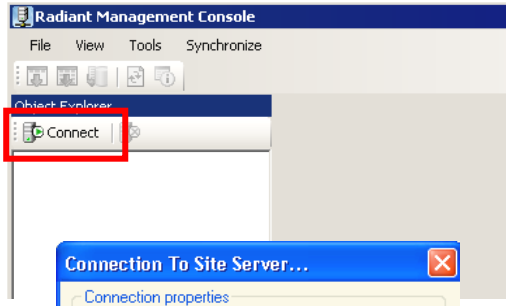
Perform Exercise 3 in the Offline V2 Exercise Handbook.

Selecting Stores Managed by Server

- Use Radiant Management Console to select stores whose offline workstations will be managed by server

Start / **Programs** / **CounterPoint SQL** / **Radiant Management Console**

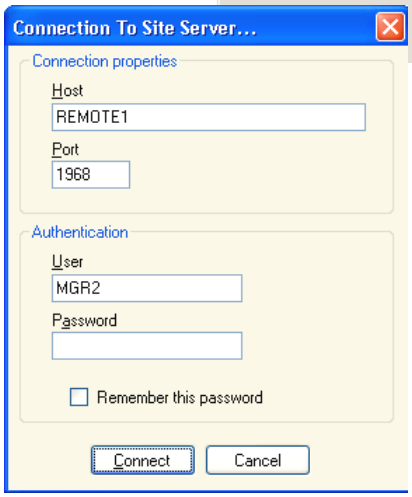
Click Connect to connect to the server.



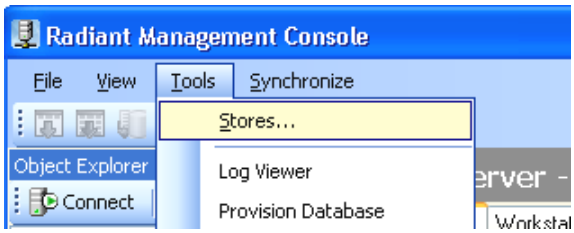
Enter the Hostname or IP address of the server. You can enter "localhost" if you are running the Management Console on the server.

Enter the port that you're using for the RadSync service.

Enter the user ID and password of a CounterPoint user who has authority (in the system security code) to access the management console.



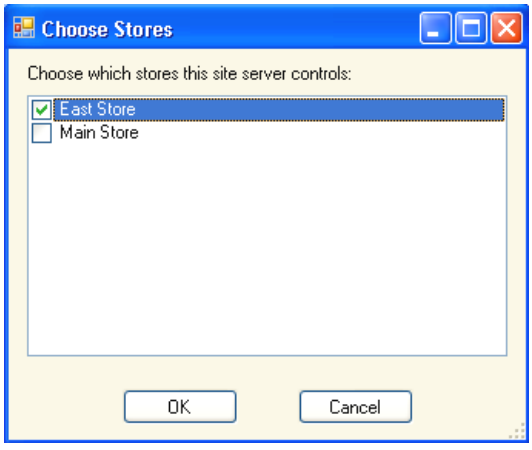
After connecting to the server, select **Tools** / **Stores**.



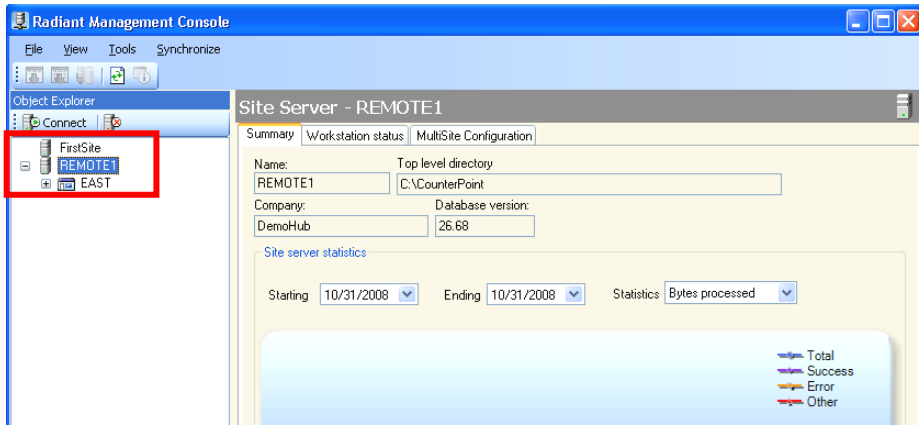
Select the stores whose offline workstations will be managed by this server.

WAN or LAN: Select all stores with offline workstations.

Multi-Site: Select store associated with site where server is located.



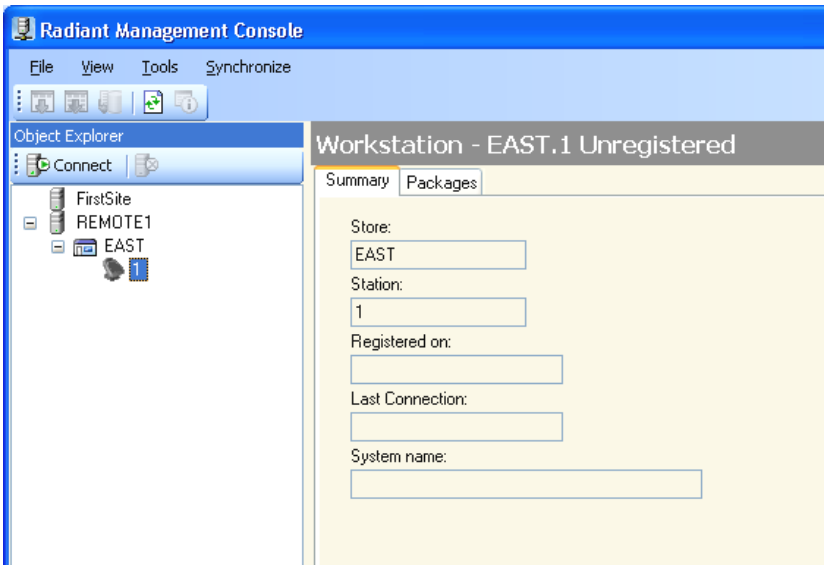
After selecting store(s)



The store's station now appears in the Object Explorer.

The black screen is a sign that the workstation is not yet registered with the server.

After the workstation has the RadSync service installed and it registers with this server, the screen icon will be blue and the "Registered on" date/time, "Last Connection" date/time, and "System name" will appear.



Exercise 4: Select Stores Managed by Server

In this exercise, you will

- use the Radiant Management Console to connect to the server and select the store to be managed by the server
- view the store's workstations before they have registered with the server

Perform Exercise 4 in the Offline V2 Exercise Handbook.

SECTION 3: DEPLOYING OFFLINE V2 ON WORKSTATIONS

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Removing Offline Ticket Entry ("V1")

- Cannot mix Offline V1 and Offline V2 workstations in a single company
- Remove Offline V1 before installing Offline V2 on each workstation

Steps to remove Offline Ticket Entry V1 from a workstation:

1. Ensure no one is using Offline Ticket Entry on the offline workstation.

2. Use the DataXtend Controller on either the workstation's server or the offline workstation to force replication between the workstation and its server.

   Review the replication log to ensure that the session was successful and that all new and changed data in the offline's database was replicated to its server.

3. Use the DataXtend Administrator on either the workstation's server or the offline workstation to condemn the offline workstation.

   Force replication again after condemning the site.

4. Delete the top-level CounterPoint folder on the offline workstation. (Don't delete the CounterPoint folder below Program Files – the workstation uses this to run CounterPoint when it is online with the server!)

5. Delete the CPSQLPackages directory and its sub-directories from the offline workstation.

6. On the offline workstation, use SQL Server Management Studio to see if the SQL user **cpsql** already exists. If this SQL user exists, use SQL Server Management Studio to change their password to **CPOffline8**.

   Note: If necessary, wait until MSSQL/SSE 2005 has been installed on the workstation to perform this step.

Prerequisites Installation on Workstation

Before Installing Prerequisites

- (WAN) Copy or deliver server's top-level CounterPoint directory to local drive of each workstation or to a local computer that can be accessed by the offline workstations
  - Avoids permission problems copying across servers
  - Avoids performance impact and/or low bandwidth problems

Install Prerequisites

- Log in to workstation as Windows administrative user and run **CPSQLPrereqs.exe**
- Optional uninstall of MSDE if present
  - Uninstall deletes all existing local SQL databases
  - Backup databases before running CPSQLPrereqs.exe to retain
- Optional uninstall of PDRE or DXRE if present (from Offline V1)
- Optional install of SSE if no MSSQL 2005 already installed as default instance
- Automatically installs if not present
  - .NET Framework 3.0
  - SQL Native Client
  - SQL Server Management Objects
  - SQLXML4
- Takes 15-25 minutes to uninstall and install all components
- Reboot workstation when finished

Exercise 6: Install Prerequisites on Workstation

The Offline1 workstation that you are using in class is already in this condition:

- SQL Server Express 2005 is installed
- DXRE is not installed

In this exercise, you will execute CPSQLPrereqs.exe and

automatically install (silently)

- .NET Framework 3.0
- SQL Native Client
- SQL Server Management Objects
- SQLXML4

Perform Exercise 6 in the Offline V2 Exercise Handbook.

Install Offline V2 on Workstation

Execute OfflineInstall.exe in server's OfflineFiles directory

- Execute from workstation while connected to server ("online")

OfflineInstall.exe automatically does these things:

- Requests name of top-level CounterPoint directory on server so it can find WorkstationSetup.exe and top-level files in later steps
- Runs **WorkstationSetup.exe** from server's top-level CounterPoint directory
- Creates and attaches database named **CPOffline** on offline workstation
- Runs **mssql.sql** against CPOffline database
- Creates SQL user named **cpsql** with password of **CPOffline8**
  - assigns sys_admin server role to 'master' and 'CPOffline' databases
  - grants database access to 'master' and 'CPOffline' databases
  - assigns db_owner database role to 'master' and 'CPOffline' databases
- Creates **CPOffline** top-level directory on workstation and copies server's top-level CounterPoint directories and files into it (no one can be in CounterPoint on server)
- Extracts **OfflineUpdateTopLevel.exe** from OfflineInstall.exe and places in CPOffline directory on workstation
- Modifies **Companies.ini** on workstation to reflect CPOffline database name and connection string
- Adds Offline shortcuts to Program Group specified for Offline Installation icons and creates desktop shortcut
- Runs **RadSyncInstall.exe** to install Radiant Synchronization Service on workstation
- Runs **Radiant.Retail.Sync.Registration.exe** from specified server to start registration function of offline workstation with server
- Optionally initializes workstation's offline database

Exercise 7: Run OfflineInstall.exe on Workstation

In this exercise, you will execute OfflineInstall.exe on the workstation, which

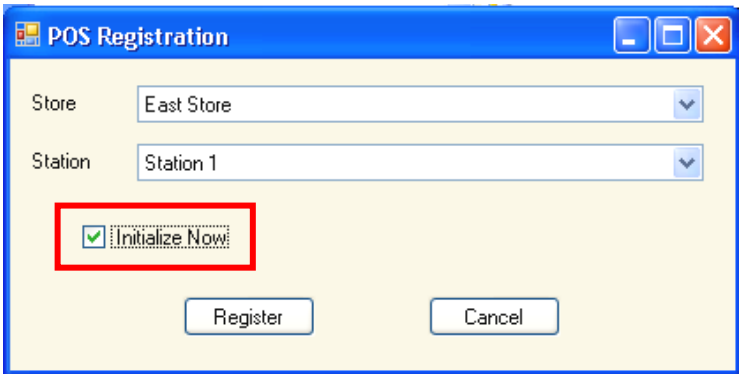
- runs WorkstationSetup.exe to install CounterPoint on a workstation for use when running “online” with its server
- creates the **CPOffline** database on the workstation
- creates the SQL user **cpsql** (password **CPOffline8**) as the owner of the CPOffline database
- creates the **CPOffline** top-level directory and copies the server’s top-level files into it
- updates the workstation’s connection string to the CPOffline database
- creates icons and shortcuts to run Offline V2 Ticket Entry
- calls **RadSyncInstall.exe** to install the RadSync service
- runs the workstation Registration function to allow workstation to register with its server

Perform Exercise 7 in the Offline V2 Exercise Handbook.

Initializing the Offline Workstation Database

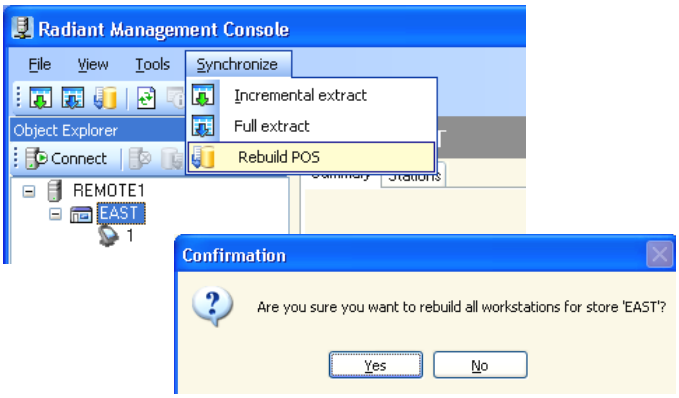
- Enables synchronization of data between server and workstation registered with that server

- In POS Registration, **Initialize Now** check box to start initialize for individual workstation when
  - new workstation on existing offline network
  - only has one workstation

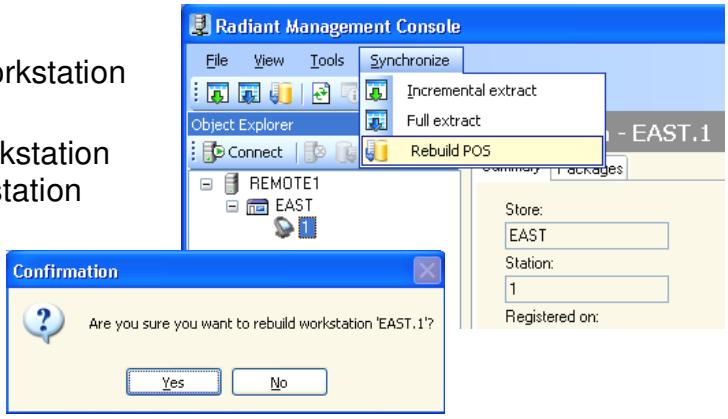


- Can also initialize in Radiant Management Console by selecting **Synchronize** / **Rebuild POS** on the server or workstation

Select Store to rebuild databases for all offline workstations at a store at the same time



Or select a single workstation
- new workstation
- only has one workstation
- fix just one workstation



What Happens During Initialization or Rebuild POS

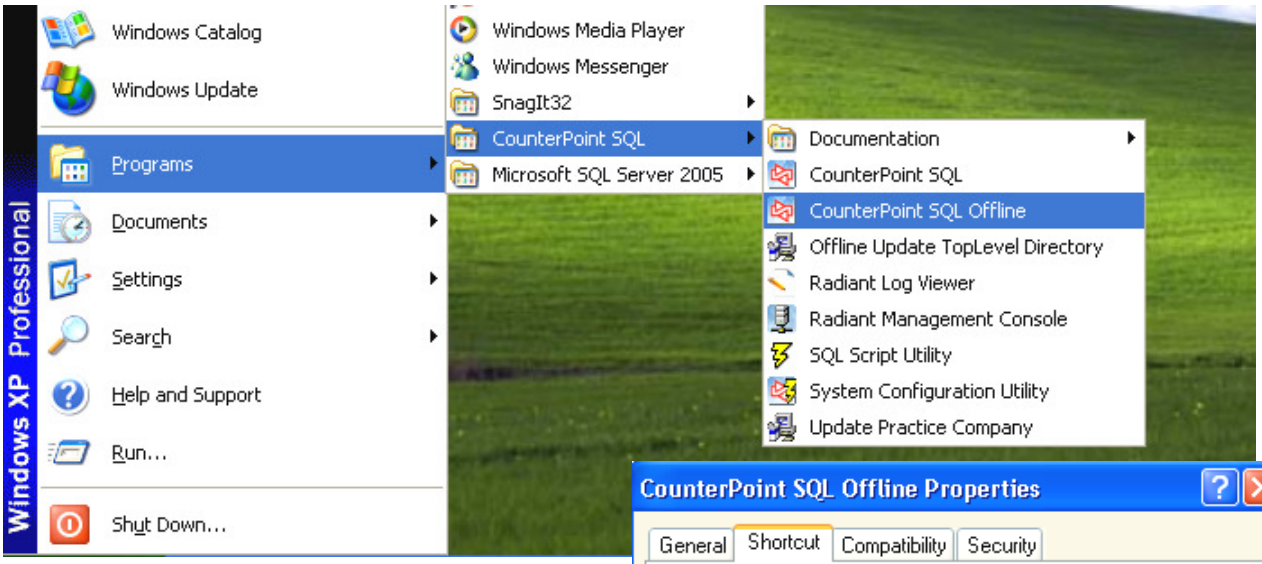
Site Server:

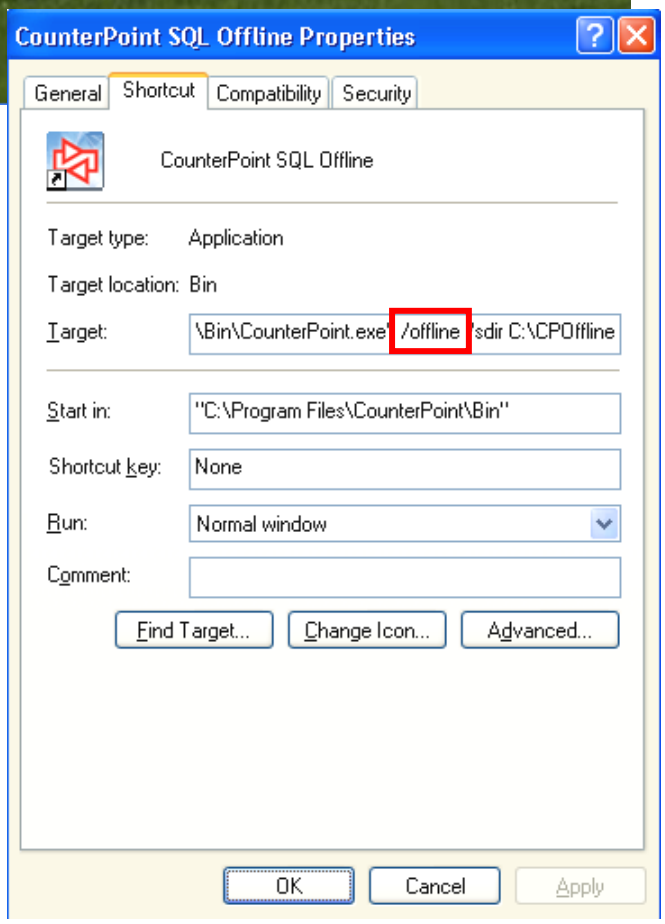
- Do a full extract from Server's database into **Configuration_DEFAULT.SITEHOST_<date/time>.xml**
- Zip Configuration_ DEFAULT.SITEHOST_<date/time>.xml , BuildDatabase.sql, and Sync\POS*.* into **Configuration_ DEFAULT.SITEHOST_<date/time>.zip**. Put in the **Sync\Outbox** and create a message indicating that a package is ready

Offline Workstation:

- During "heartbeat" check, gets message to pick up **Configuration_DEFAULT.SITEHOST_<date/time>.zip** and places in **CPOffline** \ **Sync** \ **Inbox** directory
- Unzips the file into **CPOffline** \ **Sync** \ **Processing** directory
- Extracts any tickets/customers from CPOffline database that haven't been extracted since the last synchronization
- Backs up existing CPOffline database as **CPOffline_<date/time>.zip** in **C:\CPOffline\Sync\Backups** directory (if there is room – 4 GB)
- Creates temp database named **TEMP_RebuildPOS** in C:\CPOffline directory
- Runs the **BuildDatabase.sql** script against TEMP_RebuildPOS database
- Executes contents of the Sync\POS directory against TEMP_RebuildPOS database
- Imports the Configuration_<date/time>.xml file into TEMP_RebuildPOS database
- Stops RadConnect part of RadSync service
- Directly copies from CPOffline database to TEMP_RebuildPOS database:
  - DB_CTL
  - RC* tables messages
  - RS* tables content
- Detaches and deletes CPOffline database
- Copies TEMP_RebuildPOS database to CPOffline and attaches it
- Restarts RadConnect part of RadSync service
- If no errors occur, moves files from **Sync** \ **Inbox** and **Sync** \ **Processing** to **Sync** \ **Processed**

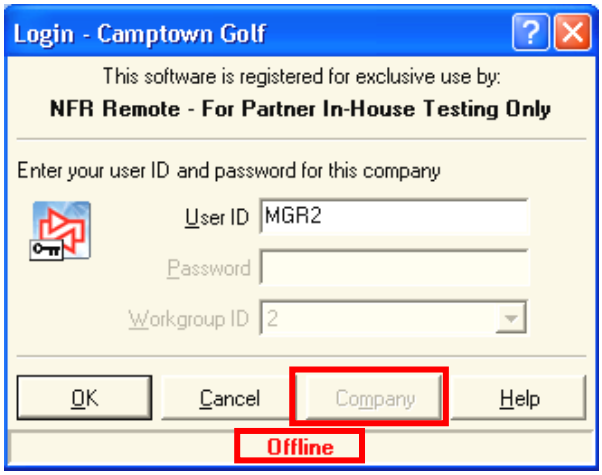
Running CounterPoint in Offline Mode





If RadSync service is installed and /**Offline** parameter is used when starting CounterPoint

- skips Select a Company login (always uses **CPOffline**)
- Company button disabled on User/Password login
- **Offline** appears in red



Exercise 8: Initialize/Rebuild the Offline Database

In this exercise, you will use the Radiant Management Console to rebuild the offline database ("initialize") for the workstation.

You will perform these activities:

- Start Radiant Management Console on the workstation and select **Synchronize** / **Rebuild POS**
- Review the package processing results in the Management Console on the workstation, refreshing as necessary
- Review the package processing results in the Management Console on the workstation's server
- Start CounterPoint in Offline mode on the workstation and explore the menu selections

Perform Exercise 8 in the Offline V2 Exercise Handbook.

SECTION 4: DATA SYNCHRONIZATION

Sync Directory on Server and Workstations 1

Sync Directory Folders 2

Sync Configuration Files.....3

Synchronization Packages: Server → Workstation.....4

Synchronization Packages: Workstation → Server 5

Radiant Service Status.....6

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Sync Directory on Server and Workstations

Server **CounterPoint / Sync**

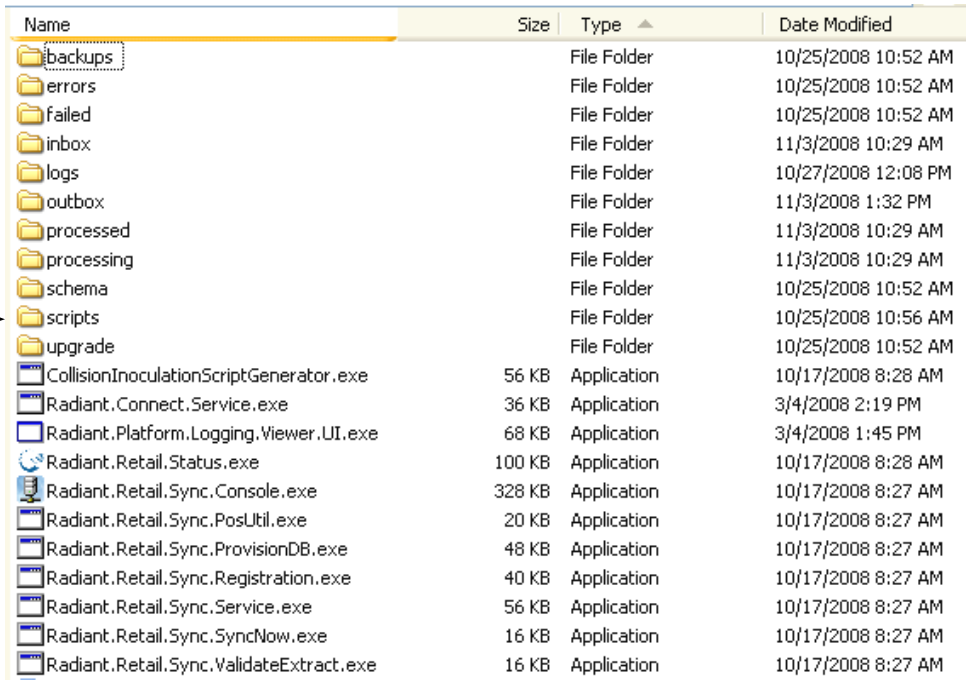
Created when RadSync service is installed

Workstation **CPOffline / Sync**

Created when RadSync service is installed

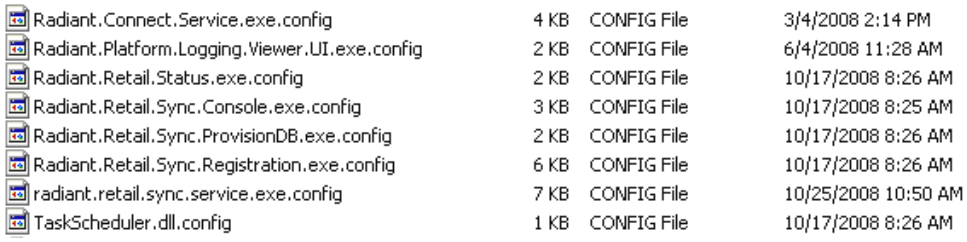
Folders and Applications

Only on server →



Name	Size	Type	Date Modified
backups		File Folder	10/25/2008 10:52 AM
errors		File Folder	10/25/2008 10:52 AM
failed		File Folder	10/25/2008 10:52 AM
inbox		File Folder	11/3/2008 10:29 AM
logs		File Folder	10/27/2008 12:08 PM
outbox		File Folder	11/3/2008 1:32 PM
processed		File Folder	11/3/2008 10:29 AM
processing		File Folder	11/3/2008 10:29 AM
schema		File Folder	10/25/2008 10:52 AM
scripts		File Folder	10/25/2008 10:56 AM
upgrade		File Folder	10/25/2008 10:52 AM
CollisionInoculationScriptGenerator.exe	56 KB	Application	10/17/2008 8:28 AM
Radiant.Connect.Service.exe	36 KB	Application	3/4/2008 2:19 PM
Radiant.Platform.Logging.Viewer.UI.exe	68 KB	Application	3/4/2008 1:45 PM
Radiant.Retail.Status.exe	100 KB	Application	10/17/2008 8:28 AM
Radiant.Retail.Sync.Console.exe	328 KB	Application	10/17/2008 8:27 AM
Radiant.Retail.Sync.PosUtil.exe	20 KB	Application	10/17/2008 8:27 AM
Radiant.Retail.Sync.ProvisionDB.exe	48 KB	Application	10/17/2008 8:27 AM
Radiant.Retail.Sync.Registration.exe	40 KB	Application	10/17/2008 8:27 AM
Radiant.Retail.Sync.Service.exe	56 KB	Application	10/17/2008 8:27 AM
Radiant.Retail.Sync.SyncNow.exe	16 KB	Application	10/17/2008 8:27 AM
Radiant.Retail.Sync.ValidateExtract.exe	16 KB	Application	10/17/2008 8:27 AM

Configuration Files (contains parameters for each function)



Radiant.Connect.Service.exe.config	4 KB	CONFIG File	3/4/2008 2:14 PM
Radiant.Platform.Logging.Viewer.UI.exe.config	2 KB	CONFIG File	6/4/2008 11:28 AM
Radiant.Retail.Status.exe.config	2 KB	CONFIG File	10/17/2008 8:26 AM
Radiant.Retail.Sync.Console.exe.config	3 KB	CONFIG File	10/17/2008 8:25 AM
Radiant.Retail.Sync.ProvisionDB.exe.config	2 KB	CONFIG File	10/17/2008 8:26 AM
Radiant.Retail.Sync.Registration.exe.config	6 KB	CONFIG File	10/17/2008 8:26 AM
radiant.retail.sync.service.exe.config	7 KB	CONFIG File	10/25/2008 10:50 AM
TaskScheduler.dll.config	1 KB	CONFIG File	10/17/2008 8:26 AM

Sync Directory Folders

Folder Name	Used For
Backups	On workstation, contains backup of "old" database that's produced during rebuild/initialize: CPOffline_<date/time>.zip (contains CPOffline_<date/time>.bak)
Errors	Contains two XML files for each error during processing, one containing the section of the original XML file with the problem records, and the other containing details of the error message.
Failed	Contains original XML file that had error, with "_Failed" appended to filename.
Inbox	Holds incoming ZIP files waiting to be processed
Logs	Contains logs for all RadSync activities Radiant.Connect.log Radiant.Retail.Sync.Console.log } On Server & Workstations Radiant.Retail.Sync.Service.log Radiant.Retail.Sync.Provision.log – On Server only Radiant.Retail.Sync.Registration.log } On Workstations only Radiant.Retail.Status.log View all in Radiant Log Viewer
Outbox	Contains outgoing files waiting to be retrieved or delivered by workstation On Server, picked up by workstations: Configuration_DEFAULT.SITEHOST_<date/time>.xml/.zip PostedTickets_ DEFAULT.SITEHOST_<date/time>.xml/.zip On Workstation, delivered to server: Tickets_<Store>.<Station>_<date/time>.xml
Processed	Contains XML &.ZIP files after successful processing
Processing	Holds XML files during processing
Schema	Contains XSD files that interpret contents of XML files
Scripts	Only on servers Contains BuildDatabase.sql script, and POS and SS directories that were created when server's database was provisioned
Upgrade	(Not currently used)

Sync Configuration Files

Configuration File	Control Settings (default value)
Radiant.Platform.Logging.Viewer.UI.exe.config	Log.Viewer.Main.log Maximum file size (1MB) Number of rotated backups (2)
Radiant.Retail.Status.exe.config **(Only used at workstation)**	Radiant.Retail.Status.log Maximum file size (2MB) Number of rotated backups (8) Host name (localhost) and Port (1968) used by offline workstation to connect to Service Status function or RadSync service on its system, and status refresh frequency (15 sec)
Radiant.Retail.Sync.Console.exe.config	Radiant.Retail.Sync.Console.log Maximum file size (2MB) Number of rotated backups (8)
Radiant.Retail.Sync.ProvisionDB.exe.config **(Only used at server)**	Radiant.Retail.Sync.Provision.log Maximum file size (2MB) Number of rotated backups (8)
Radiant.Retail.Sync.Registration.exe.config **(Only used at workstation)**	Radiant.Retail.Sync.Registration.log Maximum file size (2MB) Number of rotated backups (8)
Radiant.Retail.Sync.Service.exe.config	Radiant.Retail.Sync.Service.log Maximum file size (2MB) Number of rotated backups (8) Radiant.Connect.log Maximum file size (2MB) Number of rotated backups (8) Host and Port for RadSync service Number of days between purges of Processed files (7) Failed files (7) Backups files (7) Logs files (60) Undelivered files (30) Delivered files (7) Minimum RAM for bulk load (1000MB) Minimum space for rebuild backup (4000MB)

Synchronization Packages: Server → Workstation

Configuration_DEFAULT.SITEHOST_<date/time>.xml

- RadSync service every 15 minutes or when service restarts

  New or updated configuration data (items, customers, etc.)

- Incremental Extract in Radiant Management Console, on demand

  New or updated configuration data

- Full Extract in Radiant Management Console, on demand

  All configuration data

- RebuildPOS in Radiant Management Console, on demand

  Full replacement of offline database, including schema

PostedTickets_ DEFAULT.SITEHOST_<date/time>.xml

- RadSync service every 15 minutes or when service restarts

  Newly posted tickets

  Deletes tickets and/or settled draft capture transactions in offline database

➔ XML or ZIP file(s) always placed in Sync\Outbox on server

➔ At next 1-minute "heartbeat" contact with server, workstation retrieves all XML files in server's Sync\Outbox

➔ Workstation processes all XML files in order by date/time, one right after the other

Synchronization Packages: Workstation → Server

Tickets_<store.station>_<date/time>.xml

- RadSync service every 15 minutes

  New tickets: up to 10 per XML, unlimited XMLs
  All new customers
  Waits 15 minutes before next extract of 10 more tickets

- When RadSync service restarts

  New tickets: up to 10 in one XML
  All new customers
  Waits 15 minutes before next extract of 10 more tickets

- **Sync Now** in Radiant Services Status, on demand

  New tickets: up to 10 per XML, unlimited XMLs,
  until all are extracted
  All new customers

- **RebuildPOS** in Radiant Management Console, on demand

  New tickets: up to 10 per XML, unlimited XMLs,
  until all are extracted
  All new customers
  Followed by database replacement

➔ XML file(s) always placed in Sync\Outbox on workstation

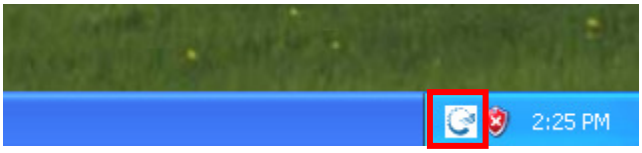
➔ At next 1-minute "heartbeat" contact with server, all Sync\Outbox XML files sent to server

➔ Server processes all XML files in order by date/time, one right after the other

Radiant Service Status

- On offline workstation only

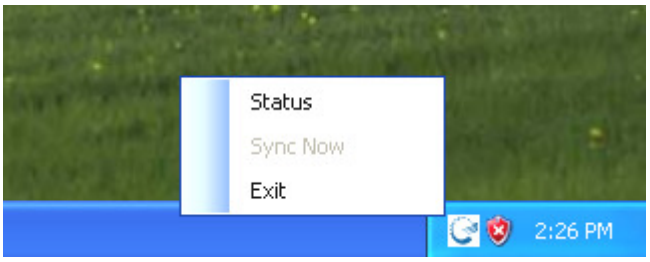
Service Status icon appears in tray after RadSync is installed and workstation is rebooted



Execute **Radiant.Retail.Status.exe** (in Sync directory) to force icon to appear

Right-click icon for

Status
Sync Now
Exit



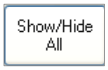
Icon changes to during offline database rebuild.

Status	Status of connection to server , services, and data synchronization Red "X" appears on tray icon if there's a problem with any status
Sync Now	Enabled only if data is waiting to be extracted or delivered to the server Forces all new tickets (in XML files with 10 tickets each) and customers to be extracted immediately, and then delivered to server. Also downloads and applies any configuration data or posted tickets data from server.
Exit	Closes Service Status and removes Service Status icon from tray

Radiant Service Status

Viewing Status

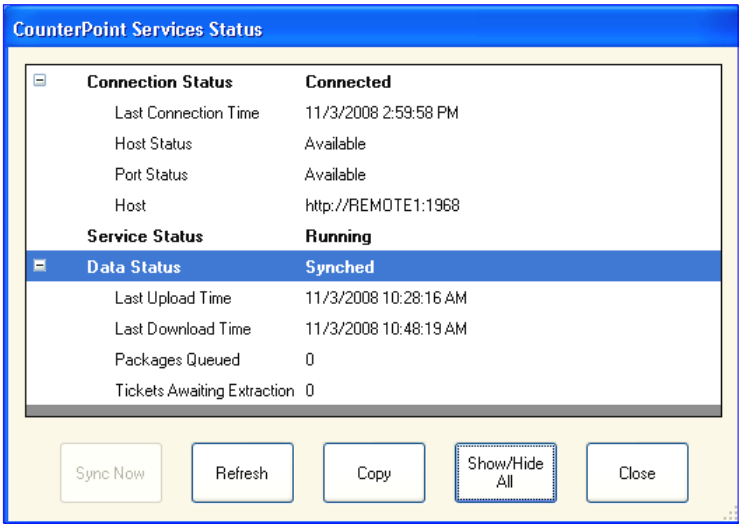
Right-click Service Status icon and select **Status** (or double-click icon)

If necessary, click 

to expand the **Connection Status** and **Data Status** information.

Connection Status shows the status of connection to the server.

Data Status shows the status of data synchronization with the server.



Connection Status	Current connection to server: **Connected** (within last 2 minutes) or **Disconnected**
Last Connection Time	When last connected
Host Status	Can workstation contact the host (server)?
Port Status	Is the port available?
Host	What computer is workstation communicating with?
Service Status	Is RadSync currently running? **Running** or **Not Running**
Data Status	Is data waiting to be processed? **Synched** (nothing waiting), **Pending Extraction** (tickets waiting to be extracted), or **Pending Upload** (all data extracted and packages waiting to be uploaded to server)
Last Upload Time	When was a package last sent?
Last Download Time	When was a package last received?
Packages Queued	How many packages are waiting to be sent?
Tickets Awaiting Extraction	How many tickets haven't been extracted into a package yet?

Exercise 9: Running Offline and Synchronizing Data

In this exercise, you will start CounterPoint in Offline Mode to enter tickets and view the synchronization process as it occurs.

You will perform these activities:

- Log in to CounterPoint Offline
- Enter a ticket and add a new customer “on-the-fly”
- Use Radiant Service Status to invoke synchronization, and then view the status as the ticket is extracted and put into a Tickets package, and as the package is delivered to the server
- Look at the XML files in the corresponding Sync directories on the workstation and server
- Post the tickets on the server that were imported from the offline workstation and view synchronization as the PostedTickets package is pulled back and processed on the workstation

Perform Exercise 9 in the Offline V2 Exercise Handbook.

SECTION 5: MANAGING THE OFFLINE ENVIRONMENT

Radiant Management Console 1

Object Explorer 2

Server Information 3

Workstation Information 5

Menu Bar 8

Radiant Log Viewer 10

Log Viewer Errors and Other Errors 13

Customizations

Top-Level Files 15

Custom Columns, Triggers & Stored Procedures 16

Stored Procedures 17

Custom Tables 19

Offline V2 Changes for V8.3.8 20

Radiant Management Console

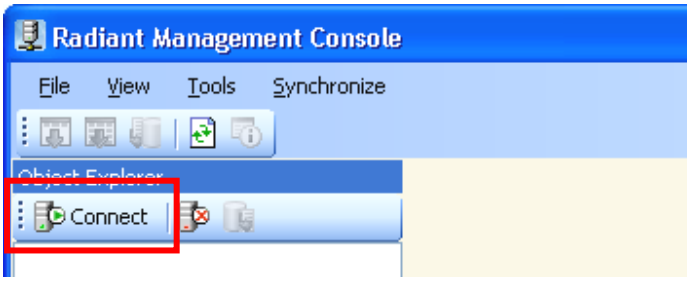
- Installed with RadSync service on servers
- Installed with CounterPoint on workstations if “Utilities” selected
- Use to manage the Offline V2 systems remotely from a single function
  - View Offline workstations managed by the server
  - View processing statistics for server
  - View workstation status information
  - View package processing history
  - Run various synchronization tasks
- Connects to a remote service running on a CounterPoint Site Server
- Also used to subscribe and schedule Multi-Site replication

Starting the Management Console and Connecting to a Server

Select **Start** / **Programs** / **CounterPoint SQL** / **Radiant Management Console** on any system.

Click

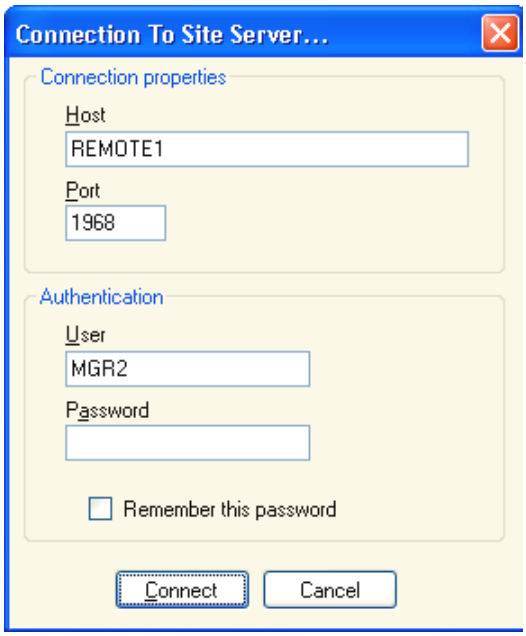
to connect to a server.



Enter the host name or IP address of the server, and the port for the RadSync service.

If you are running the Radiant Management Console from the server, you can also enter the host name of “localhost”.

Enter the user ID and password of a CounterPoint user who has authority (in the system security code) to access the management console.



Radiant Management Console: Object Explorer

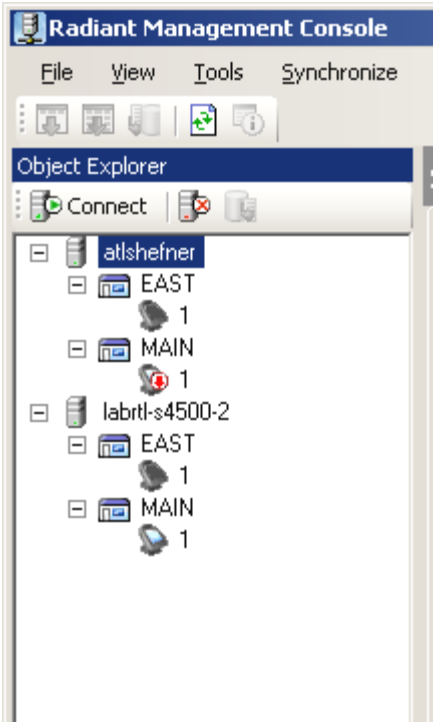
The Object Explorer shows:

- Each server that has been connected to
- Each store that is managed by one of the servers
- Each workstation that is defined for one of the stores in **Setup** / **Point of Sale** / **Stations**

= station is not registered

= station is registered and currently online

= station is registered and currently offline
(hasn't connected to server in the last 10 minutes)



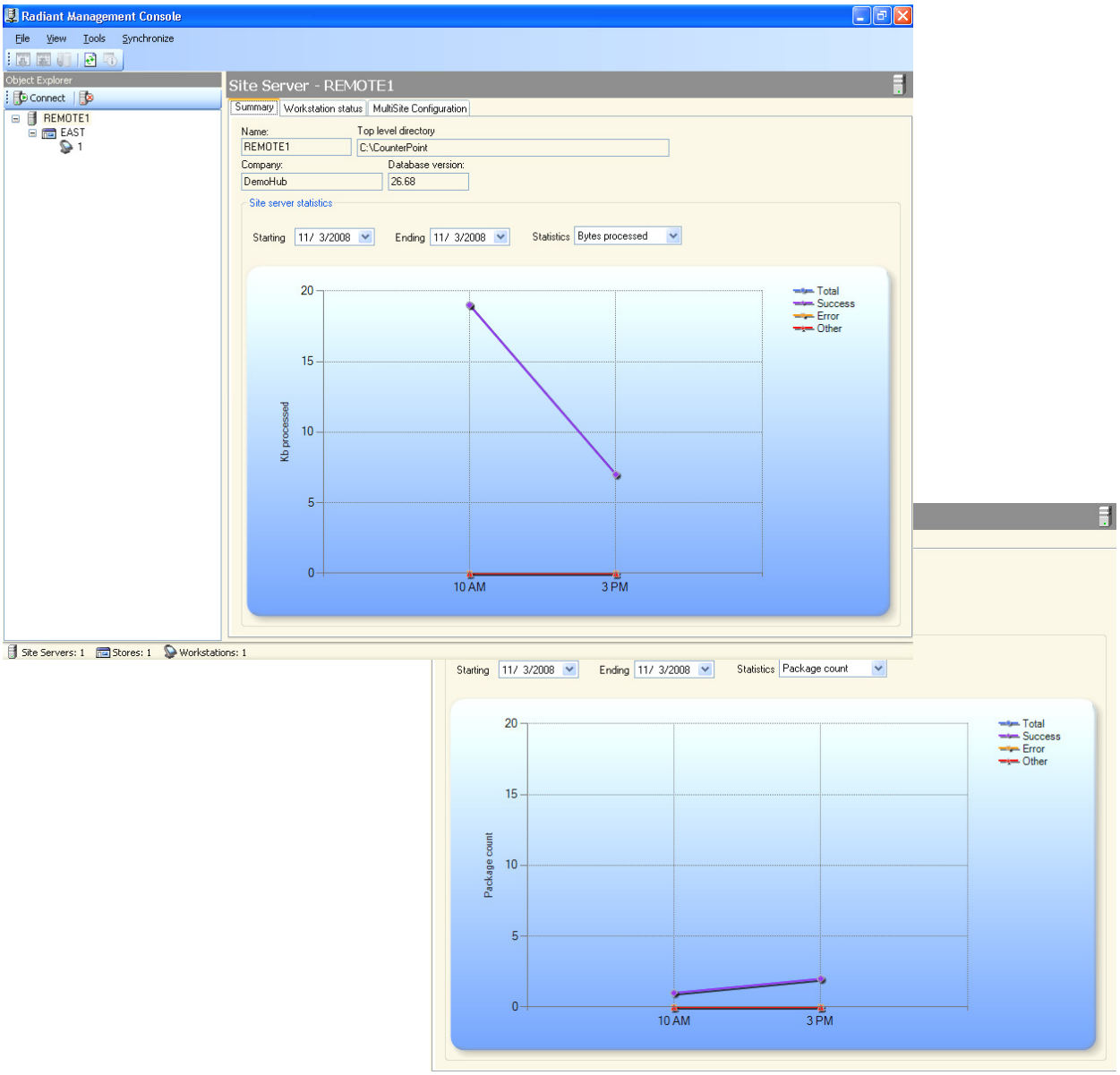
Radiant Management Console: Server Information

Server – Summary tab

When a server is selected in the Object Explorer, the Summary tab shows:

- server's top-level CounterPoint directory
- CounterPoint database name and version
- Statistics for packages processed:
  total received, successful, with errors, with other/unknown status

  Statistics can be shown for any date range and in terms of KBs processed or package count



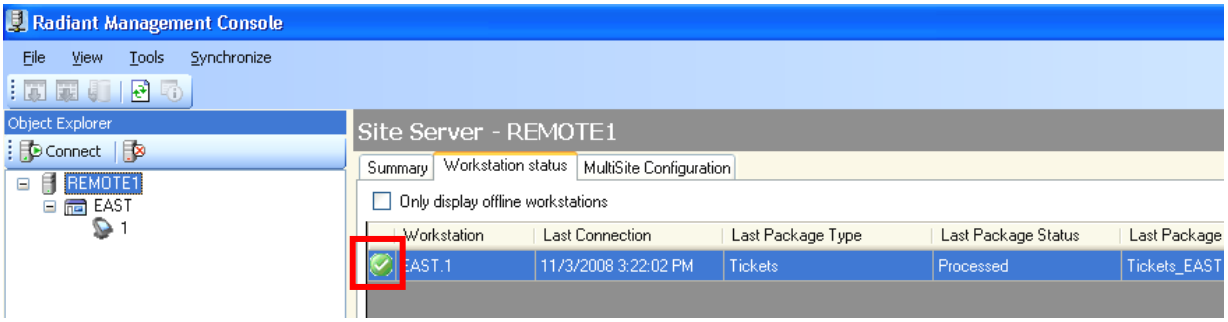
Radiant Management Console: Server Information

Server – Workstation status tab

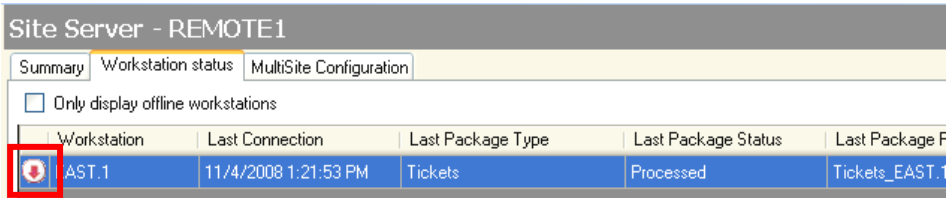
When a server is selected in the Object Explorer, the Workstation status tab shows:

- Each workstation registered with the server
- Whether the workstation is online or offline

*Workstation is **online***



*Workstation is **offline***

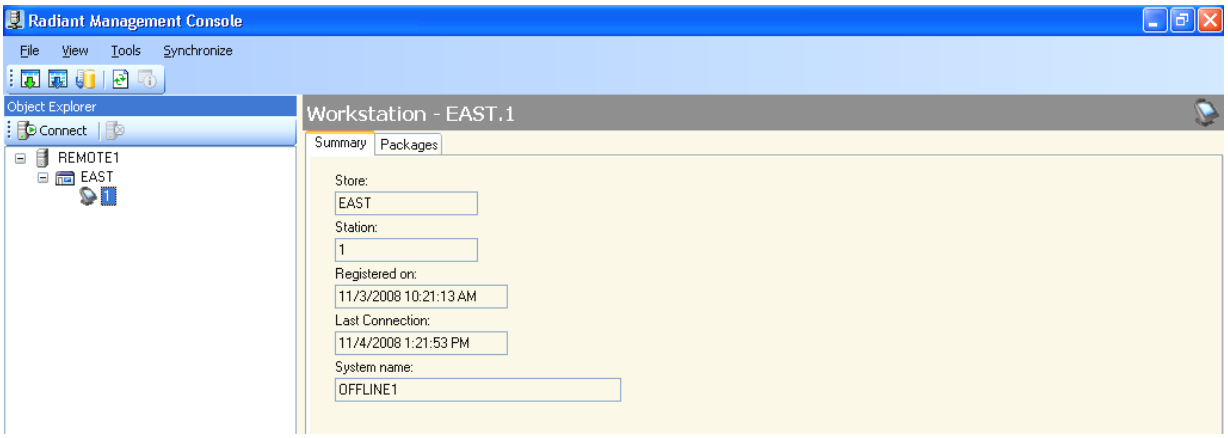


Radiant Management Console: Workstation Information

Workstation – Summary tab

When a workstation is selected in the Object Explorer, the Status tab shows:

- Date and time that workstation registered with server
- Date and time of last connection to the server
- Workstation's computer name when it was registered



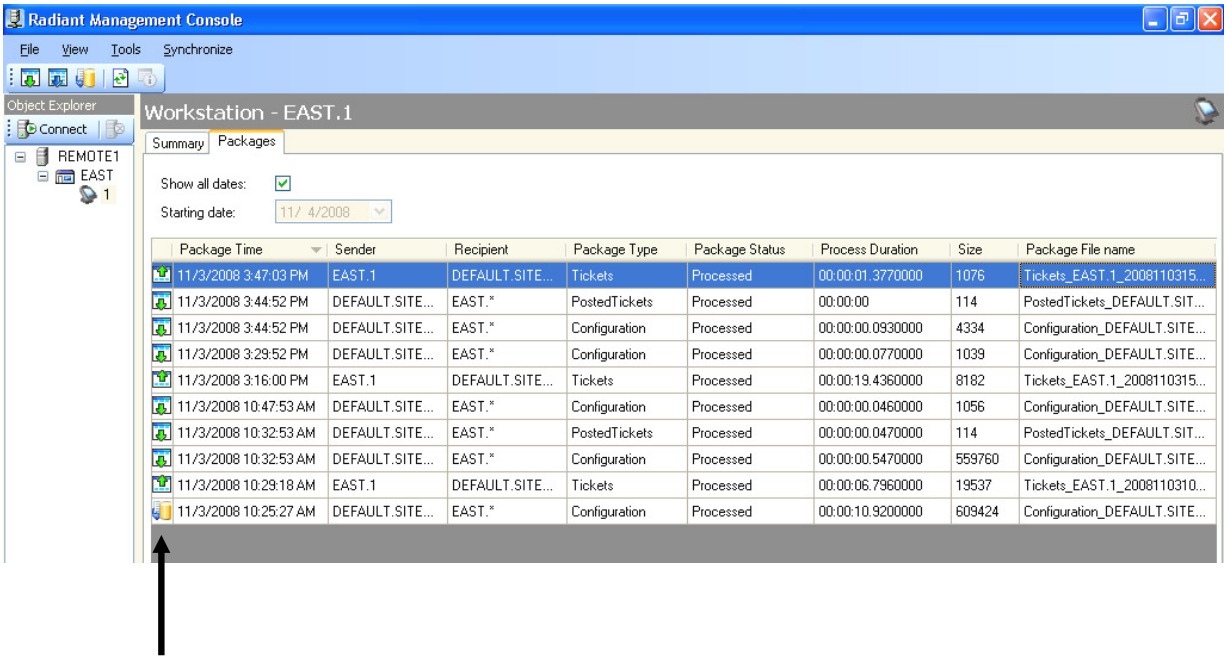
Radiant Management Console: Workstation Information

Workstation – Packages tab

When a workstation is selected in the Object Explorer, the Packages tab shows:

- Packages sent from and received by the workstation since the **Starting date** (default = current day)

- Site where package came from (**DEFAULT.SITEHOST** = server)



= received

= sent

= rebuild database

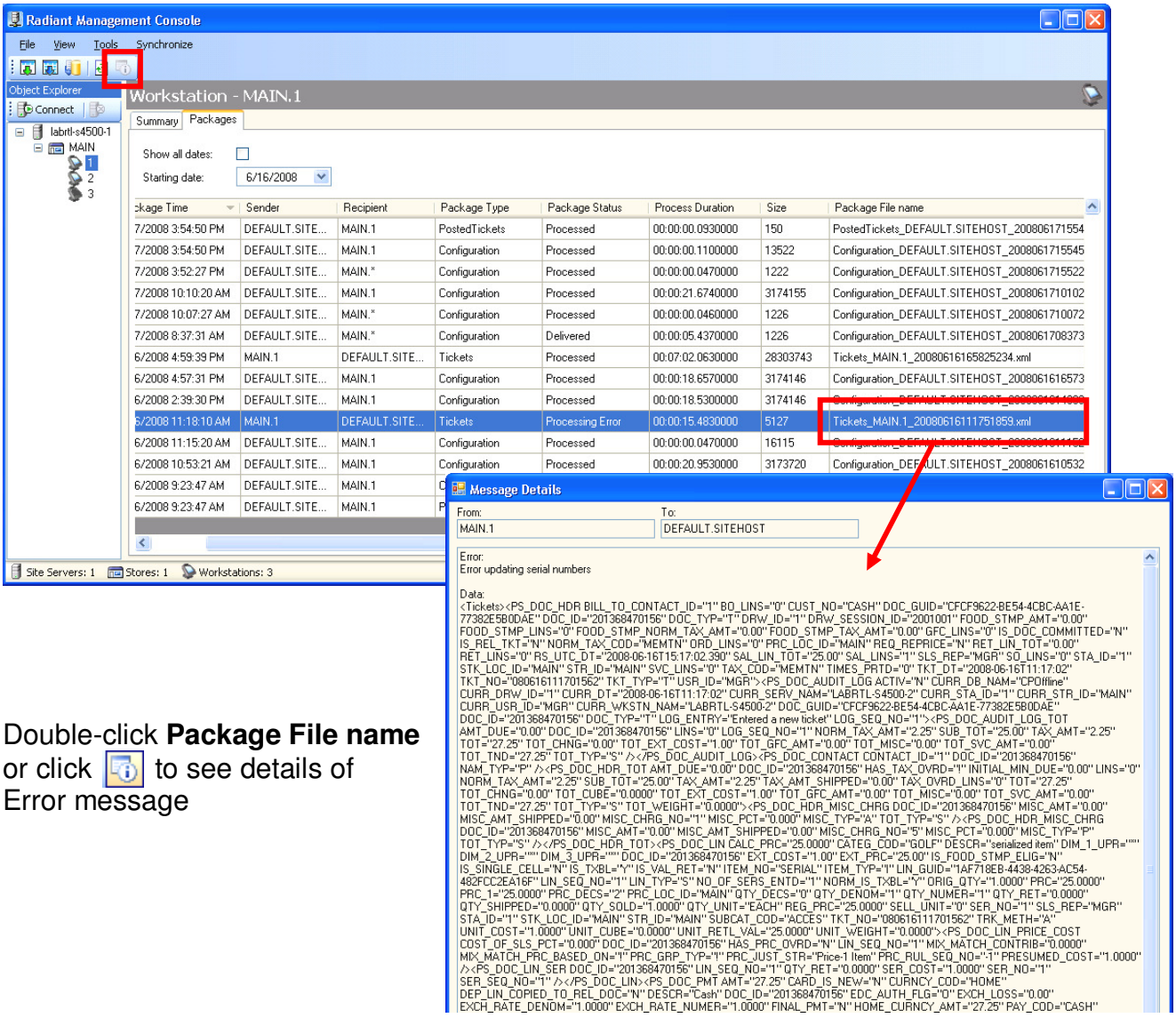
Radiant Management Console: Workstation Information

Workstation – Packages tab

Possible statuses:

Pending File Retrieval
Partially Received
Received
Pending Delivery
Delivered
Processed
Retrieval Error (couldn't retrieve package-communications error)
Delivery Error (couldn't send package-communications error)
Processing Error (received package but couldn't apply it)

No Packages Available
Unknown
Null

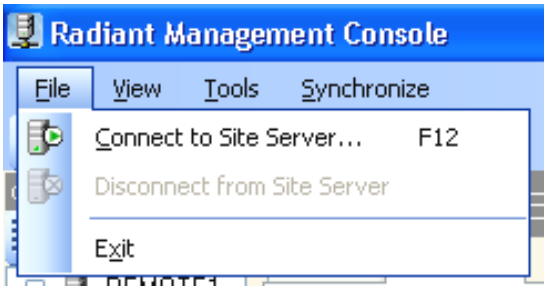


Double-click **Package File name** or click to see details of Error message

Radiant Management Console: Menu Bar

File

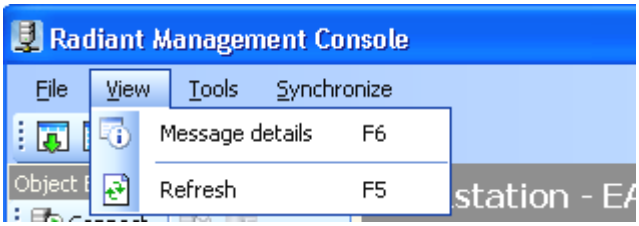
If Management Console is closed without disconnecting from a site server, automatically reconnects to that server next time Management Console opens.



View

Message details enabled only for Workstation package tab.

If Object Explorer is selected, **Refresh** closes and refreshes all server connections.

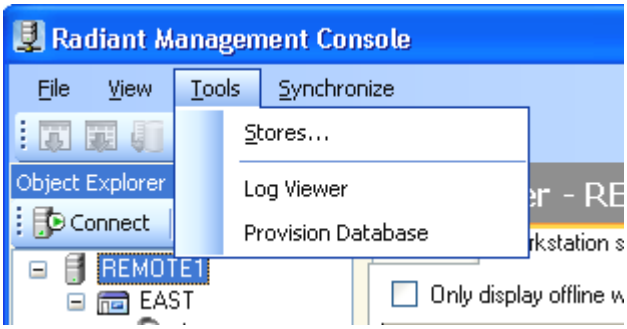


Tools

Select or deselect **stores** managed by server

Open Radiant **Log Viewer**

Provision or re-provision server's database

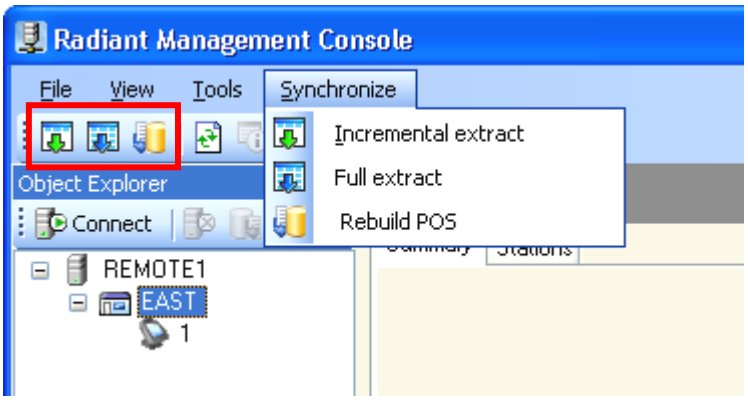


Radiant Management Console: Menu Bar

Synchronize

Extract data from server's database to send to workstation(s)

Choices enabled only when store or station is selected in Object Explorer



Incremental extract	• Extracts new and changed data from server's database for selected workstation or all store's workstations to **Configuration_DEFAULT.SITEHOST_<date/time>.xml** • Same data as normal schedule or Sync Now
Full extract	• Extracts all of server's data for selected workstation or all store's workstations to **Configuration_DEFAULT.SITEHOST_<date/time>.xml** • Full replacement of workstation data, but not of database itself
Rebuild POS	• Extracts all of server's data for selected workstation or all store's workstations to **Configuration_DEFAULT.SITEHOST_<date/time>.xml** • Includes **BuildDatabase.sql** and **Sync\POS** directory in package (but doesn't recreate these files) • Full replacement of workstation database (schema and all data) • Use for updating to new release of CounterPoint

Radiant Log Viewer

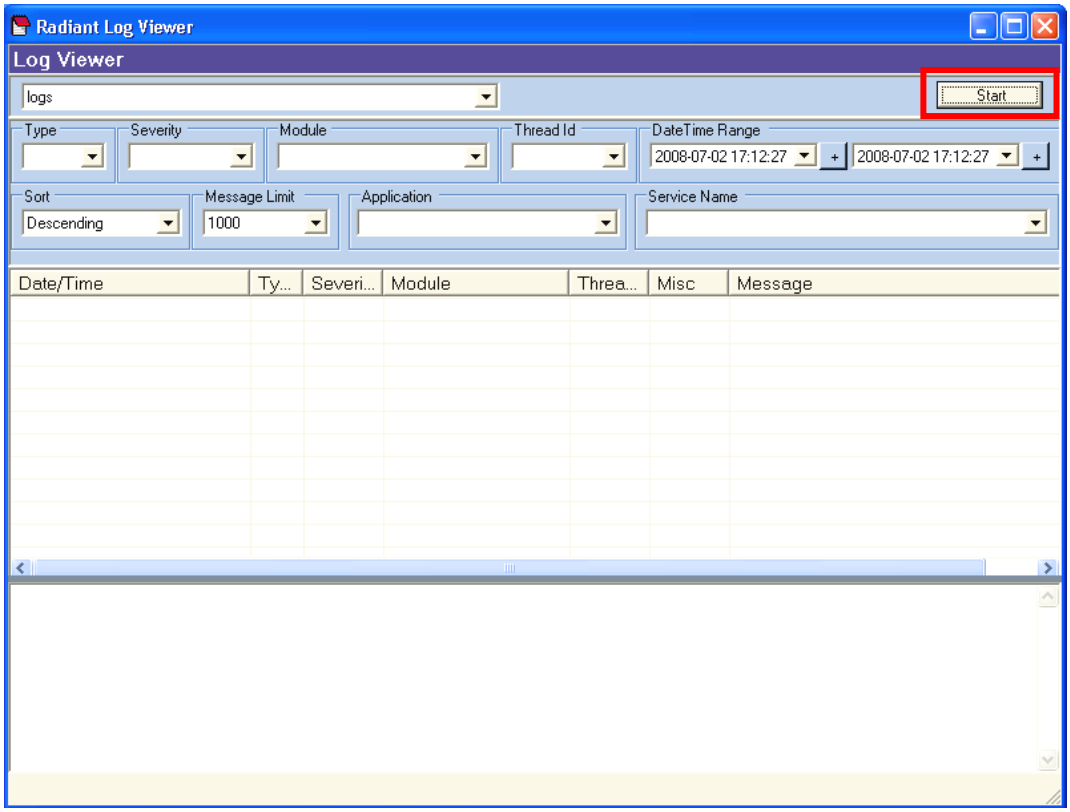
- Installed with RadSync service on servers
- Installed with CounterPoint on workstations if “Utilities” selected
- Use to view logs in Sync\Logs for that system

Starting the Log Viewer

Select **Start** / **Programs** / **CounterPoint SQL** / **Radiant Log Viewer** on a server or workstation to view the logs specific to that system.

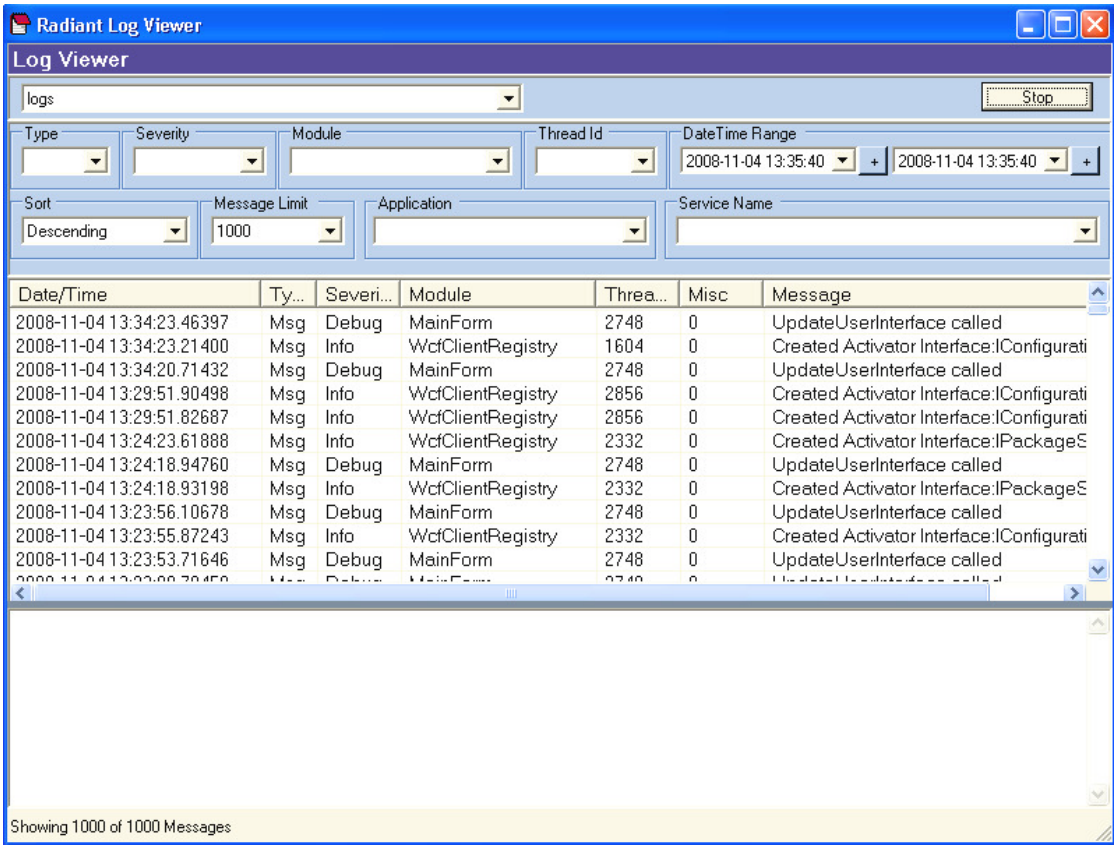
Can also be started by running Sync**Radiant.Platform.Logging.Viewer.UI.exe**.

Click Start to display log entries from the logs in the Sync\Log directory on that system.

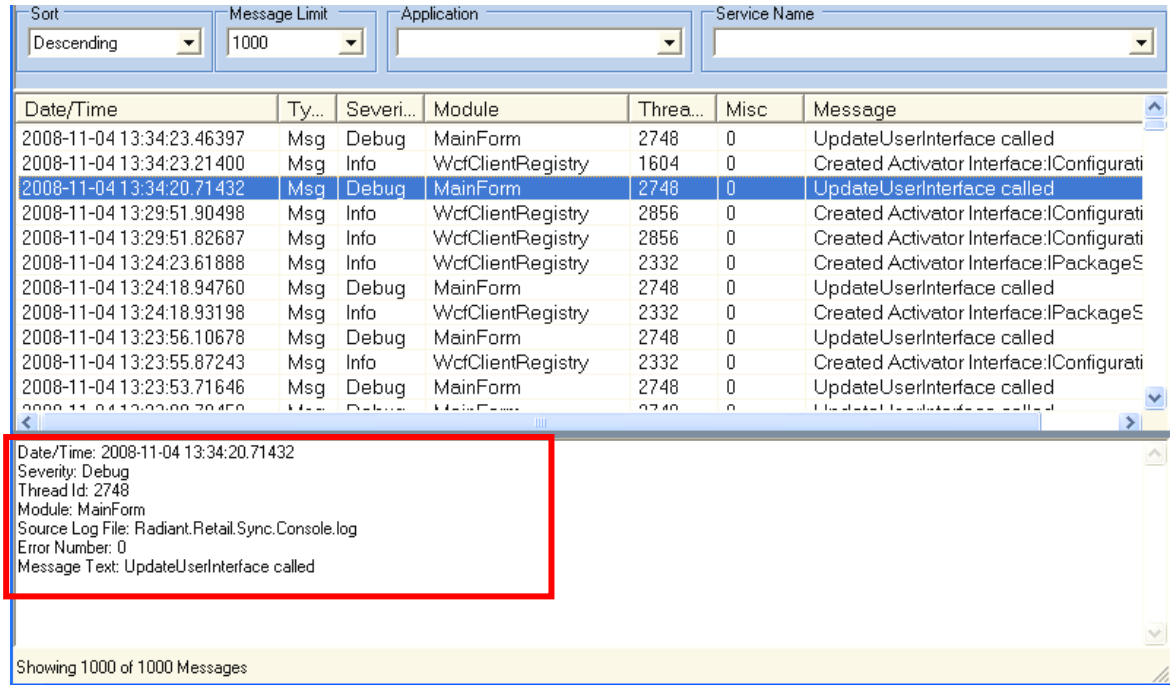


Without any filters set, entries from all logs appear.

Entries are automatically updated to the list as they are generated, until you click Stop .

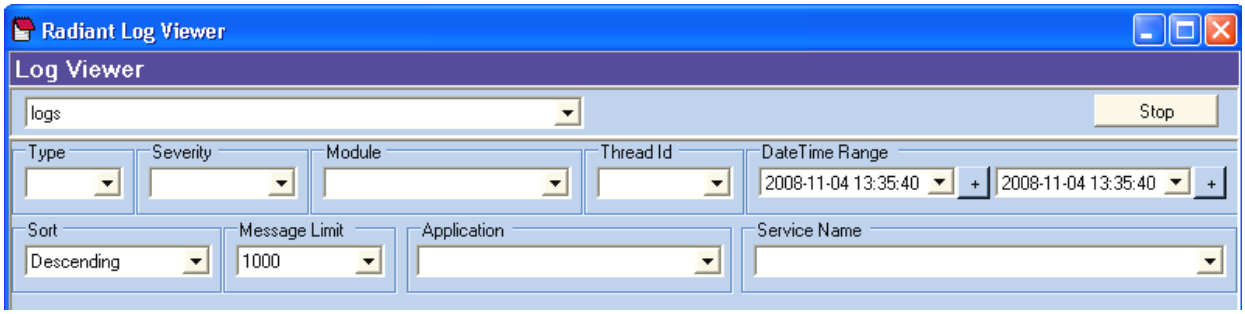


Click an entry to see the details of the message in the window below.



Radiant Log Viewer

Using the Filters



Type	**Msg** is the only choice that will result in log entries
Severity	**Error**, **Info**, **Warning**, **Debug** **Error** severity entries always appear in **red**
Module	Component of RadSync producing the entry
Thread	ID of thread
DateTime Ranges	"From" and "To" dates/times of messages
Sort	Ascending or Descending, based on entry Date/Time
Message Limit	Number of entries to return to viewer window
Application	Log from which to display entries: **Radiant.Retail.Sync.Service** (pkg extraction) **Radiant.Connect** (connecting to systems) **Radiant.Retail.Sync.Provision** (provisioning) **Radiant.Retail.Sync.Console** (Mgmt Console)
Service Name	<not used>

Log Viewer Errors and Other Errors

Unable to load the connection string for company

- Error comes from SyncConfiguration Module
- Possible cause: Server is set up for only Windows authentication, or the SQL user password hasn't been saved in Companies.ini.

Unable to establish a connection with the host

- Possible causes: Radiant Synchronization Service may not be running
  Incorrect Server Name
  Port could not be accessed – check firewall software

Unhandled exception during scheduled extraction

- Error comes from Scheduler and indicates problem with data extraction
- Possible cause: Null values in varchar data
- Correction:
  - V8.3.7 Work with Support to isolate and correct
  - V8.3.8 Will report exact record with problem

Unable to establish a connection with the host.

- Possible causes: Incorrect port in Radiant.Retail.Sync.Service.exe.config
  Wrong server in Radiant.Retail.Sync.Service.exe.config

There was an error connecting to the offline database.

- Possible causes: RadSync service not running on offline workstation
  Offline workstation not properly registered

An error occurred while trying to execute the PatchFrom_8.3.7.sql script.

- Possible cause: Server is set up for only Windows authentication, or SQL user is lacking required server role and/or database role.
- Correction:
  - Correct authentication/permission problem and manually run PatchFrom_8.3.7.sql, located in the Sync directory. Then re-provision the server database and continue with the installation

An error occurred while trying to execute the FixNotes2.sql script.

- Possible causes: Server is set up for only Windows authentication, or SQL user is lacking required server role and/or database role.

  Script cannot complete stripping null values.
- Correction:
  - Correct authentication/permission problem and manually run FixNotes2.sql, located in the Sync directory. Then re-provision the server database and continue with the installation
  - Review osql.log in Sync folder for information on record with problem

Customizations: Top-Level Files

Top-level file customizations, located in Company's subdirectories

Type of customization	Location of customized files
Data Dictionary	\CounterPoint\<company>\Dictionary \CounterPoint\<company<\CustomForms
Text Dictionary	\CounterPoint\<company>\Dictionary
Zooms, Lookups, Filters	\CounterPoint\<company>\Dictionary
Zoom Style Sheets	\CounterPoint\<company>\Zooms
Custom Toolbar Buttons	\CounterPoint\<company>\Actions
PS Forms	\CounterPoint\<company>\PSForms
Reports	\CounterPoint\<company>\Reports
Quick Reports	\CounterPoint\<company>\QuickReports
Saved PS Device Groups	\CounterPoint\<company>\Devices
Images (Customer) (Items)	\CounterPoint\<company>\CustomerImages \CounterPoint\<company>\ItemImages

How to copy them from Server to Offline workstation

- If customizations are present on server when OfflineInstall.exe is initially run on workstation, they will automatically be copied to the offline workstation.

- If customizations are not present on server when OfflineInstall.exe is run, manually run **OfflineUpdateTopLevel.exe** from C:\CPOffline directory on workstation.

Copies from server to workstation:

Directories:	Scripts System CPDialup Company (all)	Files:	CounterPoint.ini Radiant.rtf Dealer.rtf (if exists) Registration.ini

Customizations: Custom Columns, Triggers & Stored Procedures

Schema Changes to STANDARD CounterPoint Tables

To include Custom columns, triggers, and stored procedures in Offline database:

- Columns, triggers, or stored procedures must be in tables that are already included in Configuration packages (see Appendix C)
- Changes must have been in server's tables when server's database was provisioned (BuildDatabase.sql)

If changes are made after server's database was initially provisioned:

- Run **Tools** / **Provision Database** in Radiant Management Console to regenerate BuildDatabase.sql
- Then run **Synchronize** / **Rebuild POS** to rebuild all workstation databases

To send data from custom columns back to the server:

- Column must be in table that is already included in Ticket packages (see Appendix D)

Customizations: Stored Procedures

Stored Procedures for Ticket Data

- Stored procedures that execute <u>when tickets are completed offline</u> (or online):

USER_BEFORE_COMMIT_PS_DOC_BAL	(custom)
USP_COMMIT_PS_DOC_BAL	(standard)
USER_AFTER_COMMIT_PS_DOC_BAL	(custom)
USER_AFTER_SAVE_PS_DOC (V8.3.7)	(custom) or
USER_AFTER_PS_TE_SAVE_DOC (V8.3.8)	(custom)

- Stored procedures that execute when offline tickets are imported and saved to server's database:

USER_BEFORE_RS_PROCESS_TKT	(custom)
USP_RS_PROCESS_TKT	(standard)
USER_AFTER_RS_PROCESS_TKT	(custom)

- Stored procedures that are called by USP_RS_PROCESS_TKT on server:

USER_BEFORE_USP_COMMIT_PS_DOC_BAL	(custom)
USP_COMMIT_PS_DOC_BAL	(standard)
USER_AFTER_USP_COMMIT_PS_DOC_BAL	(custom)

  Note difference in names from those that execute when tickets complete. These stored procedures can call the same stored procedures that are executed while offline, if desired.

Stored Procedure USP_RS_PROCESS_TKT

- Called by RadSync service as each ticket is imported and saved in server's database
- Ensures that each ticket only updates data in server's database once

What USP_RS_PROCESS_TKT does

1. Checks value of IS_DOC_COMMITTED column in ticket.
    a. If N, continues processing.
    b. If Y, does nothing else with that ticket.
2. Executes USER_BEFORE_USP_COMMIT_PS_DOC_BAL if it exists.
3. Executes USP_COMMIT_PS_DOC_BAL.
4. Sets IS_DOC_COMMITTED to Y.
5. If document is a Sales ticket or open Order or Layaway:
    a. Executes USP_PS_DOC_UPDATE_SERIAL_ACTIVITY
    b. Executes USP_PS_DOC_UPDATE_STORE_CREDITS
    c. Executes USP_PS_DOC_UPDATE_GIFT_CERTIFICATES

    This ensures that server's database is updated for these types of activities, since this data is not sent back by a workstation in the Tickets package.
6. Executes USER_AFTER_USP_COMMIT_PS_DOC_BAL if it exists.

Customizations: Custom Tables

Schema Changes via CUSTOM Tables Added to CounterPoint

- Custom table must be in server's database when it is provisioned (BuildDatabase.sql)

If data in table needs to synchronize between server and workstation:

- Table must include **RS_UTC_DT** column (date/time data type)
- Modify **DataSyncConfig.xml** (in Sync directory) on server and each offline workstation
  - Add table to **Configuration data group** to include table's data in Configuration packages (server → workstation)
  - Add table to **Ticket data group** to include table's data in Tickets package (workstation → server)
  - Add table to **Posted Tickets data group** to clear data in custom table after offline tickets are posted by server (server → workstation)

If changes are made after server's database was initially provisioned:

- Run **Tools** / **Provision Database** in Radiant Management Console to regenerate BuildDatabase.sql
- Then run **Synchronize** / **Rebuild POS** to rebuild all workstation databases

Offline V2 Changes for V8.3.8

➔ Access to Radiant Management Console only by authorized users

Set authorization in **Setup** / **System** / **System Security Codes**

➔ After installing V8.3.8 on server and upgrading database:

On server:	Update RadSync service (**RadSyncInstall.exe**) Re-provision database
On workstations:	Update Offline V2, including RadSync service (**OfflineInstall.exe**)

On either the server or a workstation, log in as a user who is authorized to access the Radiant Management Console and select **Synchronize** / **Rebuild POS** to rebuild the database on the offline workstations for each store.

➔ Drawers can now be activated and counted while Offline, and the new **Cash Drop** and **Cash Loan** functions are also available while Offline.

Reconcile Drawer and the new **Drawer Management** functions are not available while Offline.

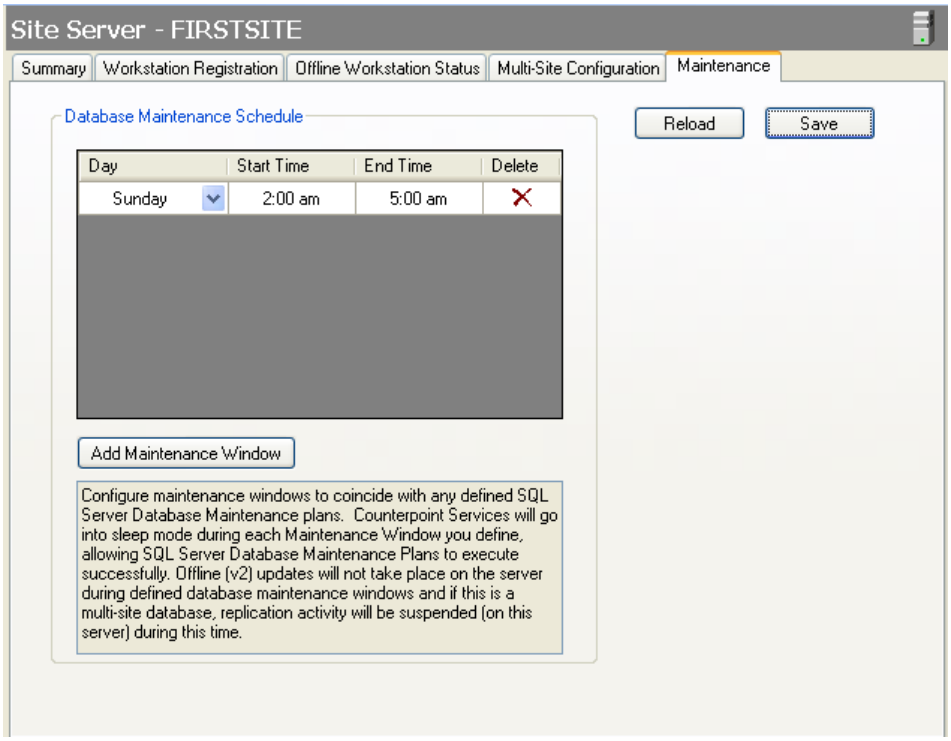
➔ Support for USER_BEFORE_RS_PROCESS_TKT and USER_AFTER_RS_PROCESS_TKT custom stored procedures (p. 5-17)

➔ Partial record updates: exclude transmission of columns from specific tables through use of <Exclude> labels within <Special Handling> sections of DataSyncConfig.xml

Multi-Site / Offline V2 Changes for V8.3.9

Both Multi-Site & Offline V2

- **CPSQL Prerequisites installable directly from DVD Launch menu**
  - Now includes .NET Framework 3.5 SP1
- **Radiant hardware now shipped with all prerequisites, except SSE**
- **"RadSync" renamed to "CP Services"**
  - CP Services automatically installed on every CPSQL server, even non-MS/Offline servers
  - CP Services default port = 51968
    view and change in Management Console
- **When using SQL authentication for CPSQL company, must save SQL user password in connection string**
- **Management Console has additional tabs**
  - On Maintenance tab, configure a "sleep" window for CPServices and DXRE to allow database maintenance



Multi-Site

- **InstallServer.bat won't run if .NET Framework 3.5 SP1 isn't present on server**
- **Don't need to provision database, unless also used for Offline V2**
- **Encrypted passwords in Deployment Parameter file**
  - PDuser, SQL user, PDAdmin passwords
  - Must use Deployment Editor to build Deployment Parameter file
  - InstallServerDiagnostics.log shows passwords, but InstallServer.log doesn't
- **UpdateTopLevel.exe no longer copies these files from Server package to Workstation package:**

Scripts*.*	Company\CPOnline
System\Accounting	Company\Export or Company\Import
System\Upgrade	Company\Statements

Offline V2

- **OfflineUpdateTopLevel.exe zips files to be copied from server to offline workstation's top-level directory**
  - Fewer files are copied; after the first time, only zips new or changed files
  - If run from offline workstation, automatically unzips file; if run from server, must manually unzip to offline workstation
- **Offline workstation registration writes a record to the CPSQL Workstation table**
  - Used to authenticate workstation when OfflineV2 is started on it
  - Use Setup / System / Workstations afterward to complete workstation configuration
- **In Service Pack: Offline workstation can continue to work in V8.3.8 during upgrade. Tickets entered offline will be converted to V8.3.9 when offline workstation is updated to V8.3.9.**

Appendix A: Changing the RadSync Port

- To use other than port 1968 on server for RadSync
- Change after RadSync is installed on Server, but before installing Offline on workstations and registering the offline workstations

1. Use Notepad to edit **Radiant.Retail.Sync.Service.exe.config** in Sync directory on server.

2. Replace **1968** with the port number you want to use in the following two keys:

   <add key=”ServicePort” value=”**1968**” />

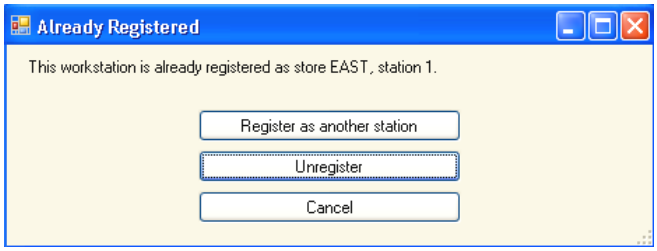
   <add key=”RemoteServicePort” value=”**1968**” />

Appendix B: Removing/Unregistering an Offline Database

- To remove an offline workstation and its database from the Offline V2 network

1. On the workstation, double-click **Radiant.Retail.Sync.Registration.exe** in the C:\CPOffline\Sync directory.

Since the workstation is already registered, you are given options to register it as a different station for the same store, or to simply unregister the workstation.

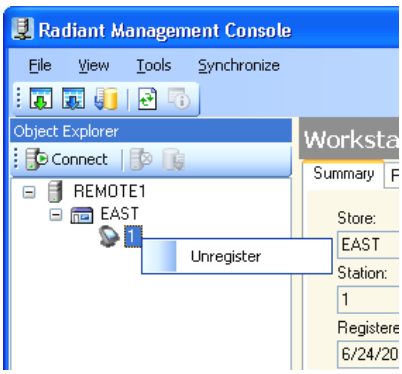


2. Select the **Unregister** button.

If the workstation can connect to the server, it will be unregistered with the server.

If the workstation is unable to connect to the server, instead start the Radiant Management Console and connect to the server.

In the Object Explorer, right-click the station and select **Unregister**.



Appendix C: Tables Included in Configuration Packages

V8.3.7

AR_CATEG_COD
AR_CATEG_NOTE
AR_CTL
AR_CUST
AR_CUST_PROF_COD
AR_FCH_COD
AR_LOY_PGM
AR_LOY_PGM_EARN_RUL
AR_LOY_PGM_RDM_RUL
AR_SHIP_ADRS
AR_SHIP_ADRS_NOTE
AR_SHIP_ZONE_COD
AR_STMNT_COD
AR_TAX_COD
AR_TAX_COD_AUTH
AR_TERMS_COD
IM_ACCT_COD
IM_ATTR_COD
IM_BARCOD
IM_BARCOD_ID
IM_CATEG_COD
IM_CATEG_NOTE
IM_CTL
IM_GRID_DIM_1
IM_GRID_DIM_2
IM_GRID_DIM_3
IM_INV
IM_INV_CELL
IM_ITEM
IM_ITEM_NOTE
IM_ITEM_PROF_COD
IM_ITEM_PROMPT
IM_KIT_COMP
IM_KIT_PAR
IM_LOC
IM_MIX_MATCH_COD
IM_PLAN_PROMO_GRP
IM_PLAN_PROMO_RUL
IM_PRC
IM_PRC_GRP
IM_PRC_RUL
IM_PRC_RUL_BRK
IM_SER
IM_SER_ACTIV
IM_SER_PROMPT
IM_SUBCAT_COD
IM_SUBCAT_NOTE
IM_SUBST_ITEM
IM_TARE_COD
IM_TAX_CATEG_COD
IM_UNIT_COD
PO_VEND
PO_VEND_CATEG_COD
PO_VEND_ITEM
PO_VEND_ITEM_NOTE
PO_VEND_NOTE
PO_VEND_TERMS_COD
PS_CTL
PS_DRW
PS_FRM_GRP
PS_FRM_GRP_FRM
PS_REAS_COD
PS_STA
PS_STA_CFG_PS
PS_STA_FRM_GRP
PS_STR
PS_STR_CFG_PS
PS_STR_PAY_COD
PS_TKT_PROF_COD
PS_TOUCH_SCRN_COD
PS_USR_DRW
SY_ACCT
SY_CALNDR
SY_COMMIS_COD
SY_COMP
SY_CURNCY_COD
SY_CURNCY_UNITS
SY_GFC
SY_GFC_ACTIV
SY_GFC_COD
SY_MENU_COD
SY_MOTD_NOTE
SY_PAY_COD
SY_PS_SEC_COD
SY_SEC_COD
SY_SHIP_VIA_COD
SY_STC
SY_STC_ACTIV
SY_SVC_COD
SY_TAX_AUTH
SY_TAX_AUTH_RUL
SY_USR
SY_USR_PREF
SY_WRKGRP

V8.3.8

AR_CATEG_COD
AR_CATEG_NOTE
AR_CTL
AR_CUST
AR_CUST_PROF_COD
AR_FCH_COD
AR_LOY_PGM
AR_LOY_PGM_EARN_RUL
AR_LOY_PGM_RDM_RUL
AR_SHIP_ADRS
AR_SHIP_ADRS_NOTE
AR_SHIP_ZONE_COD
AR_STMNT_COD
AR_TAX_COD
AR_TAX_COD_AUTH
AR_TERMS_COD
IM_ACCT_COD
IM_ATTR_COD
IM_BARCOD
IM_BARCOD_ID
IM_CATEG_COD
IM_CATEG_NOTE
IM_CTL
IM_GRID_DIM_1
IM_GRID_DIM_2
IM_GRID_DIM_3
IM_INV
IM_INV_CELL
IM_ITEM
IM_ITEM_NOTE
IM_ITEM_PROF_COD
IM_ITEM_PROMPT
IM_KIT_PAR
IM_KIT_COMP
IM_LOC
IM_MIX_MATCH_COD
IM_PLAN_PROMO_GRP
IM_PLAN_PROMO_RUL
IM_PRC
IM_PRC_GRP
IM_PRC_RUL
IM_PRC_RUL_BRK
IM_SER
IM_SER_PROMPT
IM_SER_ACTIV
IM_SUBCAT_COD
IM_SUBCAT_NOTE
IM_SUBST_ITEM
IM_TARE_COD
IM_TAX_CATEG_COD
IM_UNIT_COD
PO_VEND
PO_VEND_CATEG_COD
PO_VEND_ITEM
PO_VEND_ITEM_NOTE
PO_VEND_NOTE
PO_VEND_TERMS_COD
PS_CTL
PS_DRW
PS_FRM_GRP
PS_FRM_GRP_FRM
PS_REAS_COD
PS_STA
PS_STA_CFG_PS
PS_STA_FRM_GRP
PS_STR
PS_STR_CFG_PS
PS_STR_PAY_COD
PS_TKT_PROF_COD
PS_TOUCH_SCRN_COD
PS_USR_DRW
SY_ACCT
SY_CALNDR
SY_COMMIS_COD
SY_COMP
SY_CURNCY_COD
SY_CURNCY_UNITS
SY_GFC
SY_GFC_ACTIV
SY_GFC_COD
SY_MENU_COD
SY_MOTD_NOTE
SY_PAY_COD
SY_PS_SEC_COD
SY_SEC_COD
SY_SHIP_VIA_COD
SY_STC
SY_STC_ACTIV
SY_SVC_COD
SY_TAX_AUTH
SY_TAX_AUTH_RUL
SY_USR
SY_USR_PREF
SY_WRKGRP

Appendix D: Tables Included in Ticket Packages

V8.3.7

AR_CUST	PS_TKT_SER
SY_EDC_TRX	PS_TKT_NOTE
PS_TKT_HDR	PS_TKT_PKG_TRK_NO
PS_TKT_AUDIT_LOG	PS_TKT_PMT
PS_TKT_GFC	PS_TKT_SVC
PS_TKT_LIN	PS_TKT_TAX
PS_TKT_CELL	

V8.3.8

AR_CUST*
AR_CUST_NOTE
AR_SHIP_ADRS
AR_SHIP_ADRS_NOTE
AR_ADJ_TRX
AR_CASH_TRX
AR_CASH_TRX_APPLY
AR_FCH_TRX
AR_LOY_PT_ADJ_TRX
AR_OPN_ITEM
AR_OPN_APPLY_TO
SY_EDC_TRX
PS_DOC_HDR
PS_DOC_AUDIT_LOG
PS_DOC_AUDIT_LOG_TOT
PS_DOC_CONTACT
PS_DOC_GFC
PS_DOC_HDR_DOC_STAT
PS_DOC_HDR_EC
PS_DOC_HDR_EXT
PS_DOC_HDR_HOLD_QUOT
PS_DOC_HDR_LOY_PGM
PS_DOC_HDR_ORIG_DOC
PS_DOC_HDR_PAY_IOA
PS_DOC_HDR_PROF
PS_DOC_HDR_TOT
PS_DOC_HDR_MISC_CHRG
PS_DRW_SESSION
PS_DRW_SESSION_EVENT
PS_DRW_SESSION_EVENT_DETAIL
PS_DOC_LIN
PS_DOC_LIN_CELL
PS_DOC_LIN_CELL_EXT
PS_DOC_LIN_EXT
PS_DOC_LIN_LOY
PS_DOC_LIN_PO
PS_DOC_LIN_PRICE_COST
PS_DOC_LIN_PROMPT
PS_DOC_LIN_SER
PS_DOC_LIN_SER_EXT
PS_DOC_LIN_SER_PROMPT
PS_DOC_PMT
PS_DOC_PMT_APPLY
PS_DOC_PMT_CHK
PS_DOC_PMT_CR_CARD
PS_DOC_PMT_EXT
PS_DOC_PMT_PROMPT
PS_DOC_NOTE
PS_DOC_PKG_TRK_NO
PS_DOC_SVC
PS_DOC_TAX

- The following fields are excluded from the AR_CUST records sent to the server:

UNPSTD_BAL
BAL
ORD_BAL
NO_OF_ORDS
LWY_BAL
NO_OF_LWYS
LOY_PTS_BAL
TOT_LOY_PTS_EARND
TOT_LOY_PTS_RDM
TOT_LOY_PTS_ADJ

Appendix E: Offline V2 Glossary

Configuration Data
Data sent in XML format by a server to an offline database that is needed to ring up tickets when running offline. Data is filtered to offline workstation's store and stocking location associated with the store.

CounterPoint Services Status
Application available in system tray on offline workstations that allows user to see if connection exists to server, if tickets are waiting for extraction, if packages are waiting for upload, and the last connection time and status. Also allows for ticket packages to be built immediately and sent to server.

Extraction
Process where tickets are copied from an offline workstation's database and placed in an XML file for sending to the server, or where configuration data is copied from a server's database and placed in an XML file for sending to offline workstations

Full Extraction
Process where all configuration data is copied from a server's database and placed in an XML file for sending to offline workstations

Incremental Extraction
Process where only configuration data that has changed is copied from a server's database and placed in an XML file for sending to offline workstations

Initialize
Process performed for a new offline workstation's database that indicates to begin the synchronization of data with the server that is managing the offline database

Manage stores
Process performed in the Radiant Management Console where CounterPoint stores are assigned to a specific site server for management of the store's offline workstations

Package
XML file that contains ticket data and new customers extracted from an offline workstation's database, or XML file that contains configuration data or newly-posted tickets extracted from a server's database.

Provision

Process that runs at a site server where the CounterPoint database structure is read and several SQL scripts are created that are subsequently used to construct a database on an offline workstation, to apply triggers and stored procedures to a server's CounterPoint database, and to appy triggers and stored procedures to an offline workstation's database. Also sets up communication on the server.

Radiant Management Console

A Radiant-supplied application that can be run on any computer and that can access a server via its IP address or resolvable hostname. Used to monitor and manage offline operations.

RadSync

Short for "Radiant Synchronization Service". A Radiant-supplied function that is installed and runs as a Windows service on both CounterPoint servers and offline workstations. Responsible for keeping data synchronized between these systems.

Rebuild

Process where the offline database is fully reconstructed from SQL scripts created by the rebuild operation, and includes replacing all data in the offline database.

Registration

Process performed on an offline workstation where the workstation identifies its store and station identity and can optionally initialize its database.