



RMCS Installation Guide

CLEO

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Introduction

This document explains the procedures and steps to install the RMCS system. There are several installation files:

- Rmcsjobserver.exe – Installation for main job server system and database components.
- Rmcsadministration.exe – Installation for the administration web application.
- Rmcscommserver.exe – Installation for the communication server.
- Rmcsremote.exe – Installation for remote server.
- Rmcsterminal.exe – Installation for the terminal communication client.

See the section on post installation notes at the end of this document after installing required components.

Installing Main Server Components

The main server components consist of the Job Server, Communication Server, and RMCS web administration. These components can all reside on the same machine or can be distributed across multiple machines to distribute load.

Installing the Job Server

The Job Server manages settings, operations, and directly interfaces with the RMCS database. Part of the Job Server installation is to install the RMCS database. If this database already exists in the specified location, it will not be overwritten. The administrator will be given the opportunity to specify a different database name.

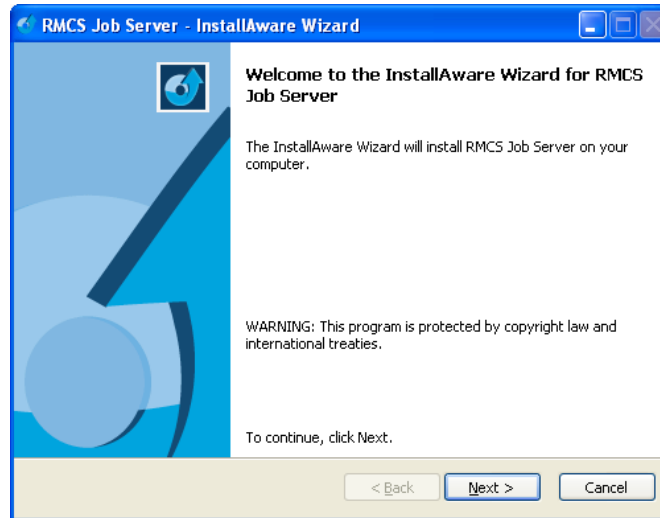
Prerequisites

You need the following prerequisites to install the Job Server and RMCS database:

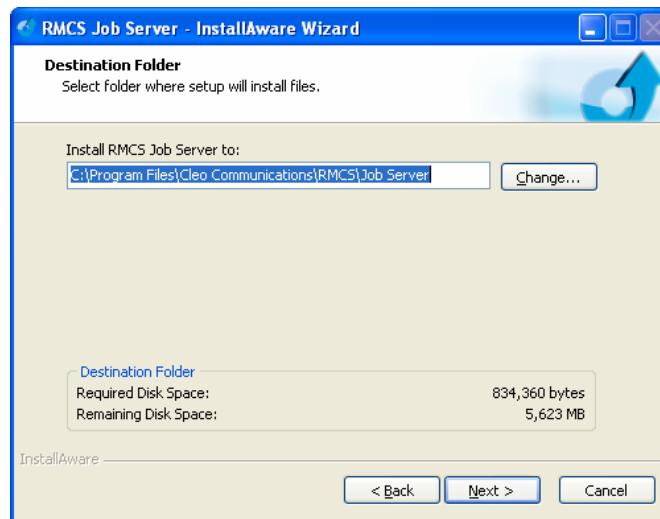
- Windows XP, Windows 2000, Windows Server 2003 or later
- Microsoft Installer 3.1
- .NET Framework 2.0
- Microsoft SQL 2005

Installation

To install the Job Server, run Rmcsjobserver.exe.



When you see the welcome screen, click Next to go to the next screen.



On the destination folder screen, select the location on your hard drive to install the Job Server service files and click the Next button.

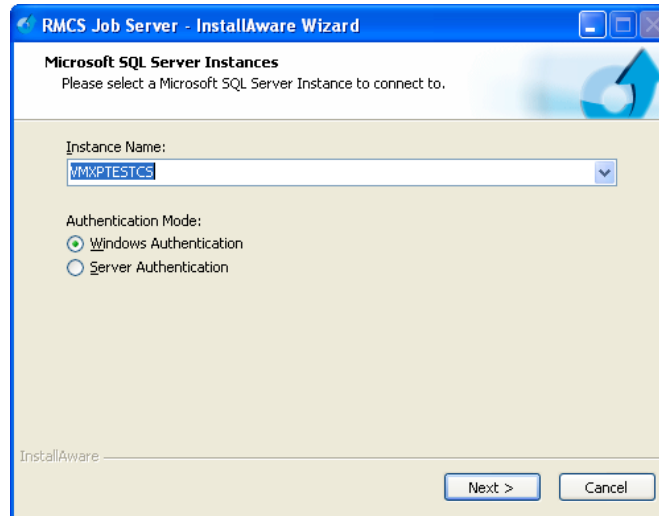
The Job Server runs as a Windows service. It can run with the permission of either Local System or as a specified user on the computer. If running as Local System, you will need to enter the credentials of a database user with read and write access to the RMCS database. Simply enter the database user id and password in the fields provided.

If the Job Server is running as another user (one who has those permissions in the database), select “User” from the “Run Service As:” drop down and then enter the user’s name and password in the fields below.

The TCP/IP Port Number is used to configure the IP port used for the Job Server’s command interface. This port defaults to 7000 but can be changed to another port number. If the Windows Firewall service is running on the machine, the installation will open the port for the port you specify.

The RMCS Database Name is the name of the RMCS database that you want to create. If you specify the name of a database that already exists, the database will NOT be replaced. To install a new database instance, the database must not already exist.

The Reference Database is the name of a database that contains information about appliances that link to the RMCS database. This will usually apply to custom implementations. If you have such a database and know the name of it, enter it here. Otherwise, leave the field blank.



The installation will scan for Microsoft SQL database servers and list the instances in the drop down. Select the instance to install the RMCS database on or enter the name of the database instance in the space provided. In order to create the database on the instance, you must have permissions to do so as either the user performing the installation via Windows authentication or specify the SQL server authentication.

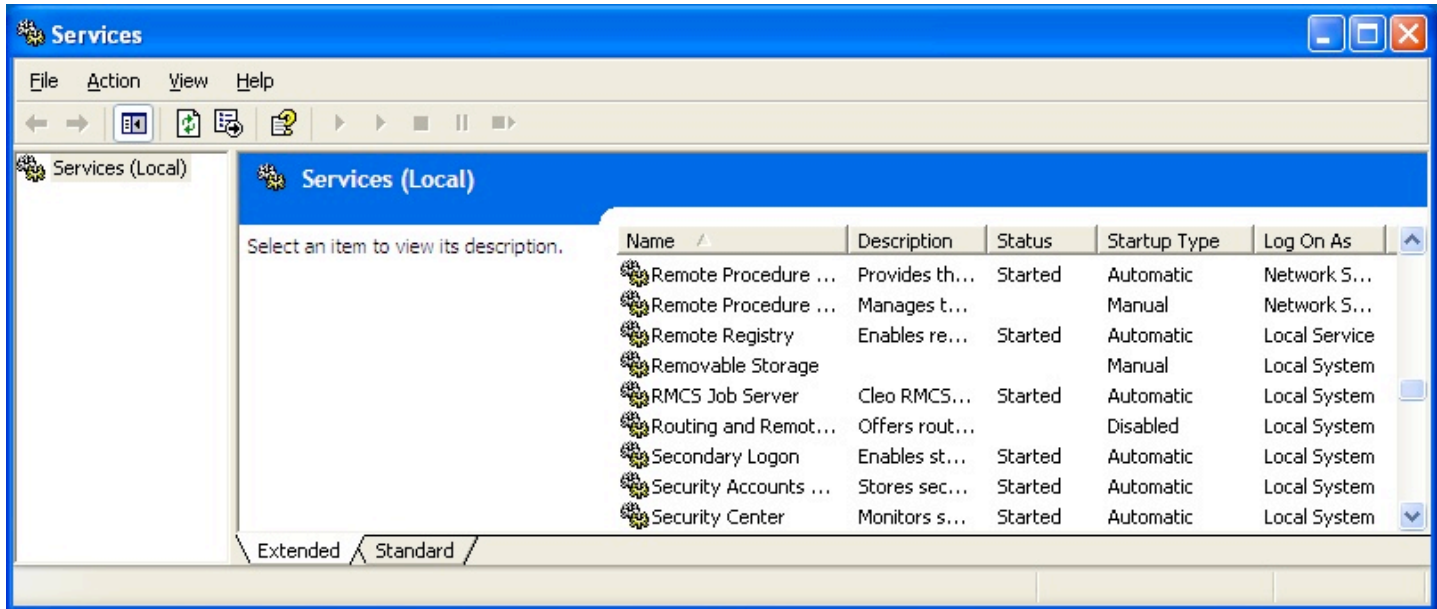
(Help: If you have problems connecting to a SQL server instance on a different computer, make sure that SQL is configured to allow remote connections. Run the SQL Server Configuration Manager tool. The protocol TCP/IP should be enabled for the application to run correctly. You may need to enable Named Pipes and VIA for the installer to work correctly. Those options can be disabled again when the installer is complete.)

Click the Next button through the following dialogs until the installation is finished.

Verification

To verify that the install completed successfully,

- 1) Check the database instance for the presence of the RMCS database that you specified.
- 2) In the computer's Administration Tools, open Services. You should see the RMCS Job Server service listed and started.



- 3) Check the log files in the directory where the service was installed. You should not see any errors listed in the log. If there are errors, check your configuration as specified in the next section.

Modifying Configuration

To change or modify the configuration for the Job Server, open the Cleo.Rmcs.JobServer.exe.config file located in the specified install directory \Job Server.

The configuration will look something like this:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <appSettings>
    <add key="LogConfigurationFile" value="C:\Program Files\Cleo Communications\RMCS\Job
Server\Cleo.Rmcs.JobServer.exe.log4net" />
    <add key="ListeningPort" value="7000" />
    <add key="ServiceDirectory" value="C:\Program Files\Cleo Communications\RMCS\Job Server" />
    <add key="ServerAddress" value="VMXPDEV" />
  </appSettings>
  <connectionStrings>
    <add name="VMXPDEV" connectionString="Data Source=VMXPDEV;Initial Catalog=RMCS;Integrated
Security=true" />
  </connectionStrings>
</configuration>
```

Fields to note are:

Configuration Name	Description
ListeningPort	This is the Job Server command port.
connectionString	The connection string with the name of the computer is the database connection string for accessing the RMCS database. The connection string with the name of the computer followed by “_ref” (i.e. VMXPDEV_ref) is the connection string for the reference database.
MaxJobThreads	Maximum number of job server destination jobs that can run at a time. Default is 10.
DatabaseTimeout	This is the number of seconds before a database operation times out. Default is 30.
DatabaseTestTimeout	This is the number of seconds before a test of the database operation times out.

	The test timeout is used to signal potential to the interface problems with database access. Default is 20.
SpecializationPeriod	<p>The period in minutes to run the background specialization. By default this value is set to 5 so that background specialization runs every 5 minutes. Valid values are 1 to 59.</p> <p>(Note: specialization runs when the remainder of current minute divided by the specialization period is zero. This means that values greater than 59 will cause specialization not to run. Values ≥ 30 will run only once per hour.)</p>
SpecializationLeadTime	<p>The lead-time (in minutes) before a job to be run that specialization will NOT occur. This lead-time is to assure that specialization does not occur just prior to a job running. The default is 5 minutes.</p> <p>Background specialization of job instances starts with the most recent job to run to the least recent job to run.</p>
SpecializationBlock	The number of job instance items to specialize for each time the specialization period is run. The default is 500.
SpecializationExclusion	<p>Use this to specify one or more times in which specialization will not occur. By default no value is specialized, which means that specialization will occur 24 hrs a day.</p> <p>To specify multiple times, separate times with a semi-colon. For example: 20:00-23:30;1:00-3:00</p>

If you modify any of the fields in the configuration, be sure to restart the Job Server service.

Installing the Communication Server

The Communication Server interfaces directly with communication hardware for contacting remote machines. Hence the Communication Server should be installed on a server with direct access to modem boards and/or networking hardware. The RMCS system is designed to run with one or more Communication Servers spread across multiple servers.

Prerequisites

You need the following prerequisites to install the Communication Server:

- Windows XP, Windows 2000, Windows Server 2003 or later
- Microsoft Installer 3.1
- .NET Framework 2.0

Installation

To install just the Communication Server, run *Rmcscommserver.exe*. You'll be presented with a welcome screen and destination folder screen similar to the ones presented in the Job Server installation.

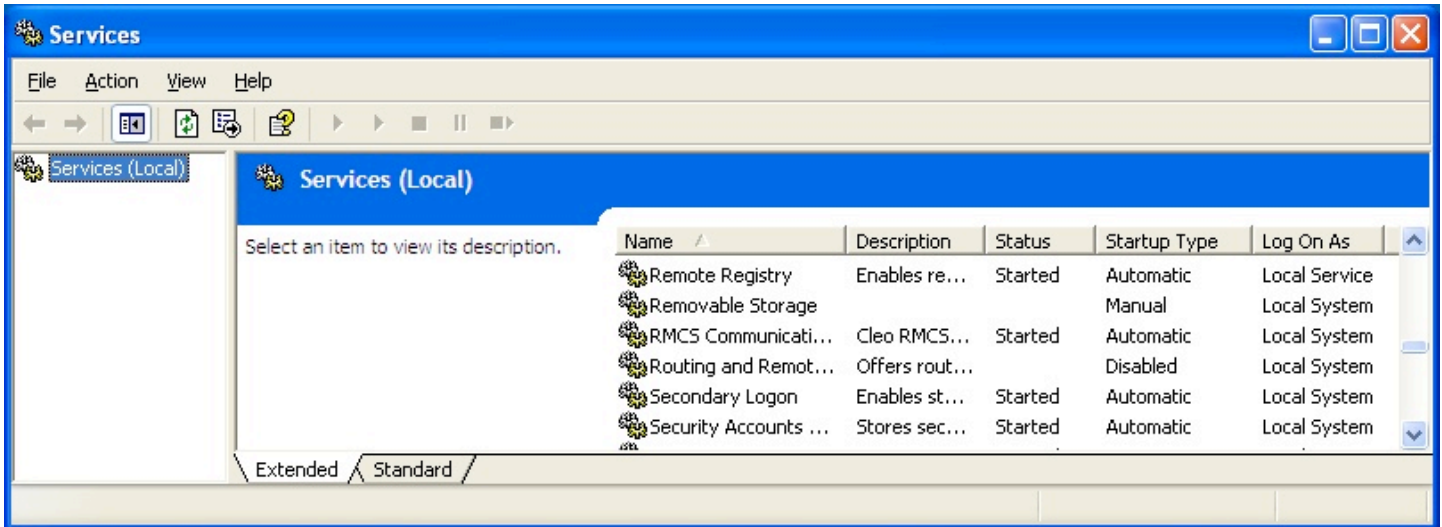
On the Communication Server Configuration screen, you can configure the Communication Server for your machine. Like the job server, this service can run either as Local System or with the credentials of a specified user.

The Server Name is populated with the machine name but can also contain the machine's IP address. The Administration Port Number is for Communication Server command interface. This is used with communication to the Job Server. The Terminal Client Port Number is the IP port that the terminal will use to connect with the Communication Server. If you Communication Server is configured to receive remote-initiated socket connections, they will need to use the port specified as the Remote Listening Port Number. Click the Next button on the following screens to finish the installation.

Verification

To verify that the install completed successfully,

- 1) In the computer's Administration Tools, open Services. You should see the RMCS Communication Server service listed and started.



- 2) Check the log files in the directory where the service was installed. You should not see any errors listed in the log. If there are errors, check your configuration as specified in the next section.

Modifying Configuration

To change or modify the configuration for the Job Server, open the Cleo.Rmcs.CommunicationServer.exe.config file located in the specified install directory \Job Server.

The configuration will look something like this:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <appSettings>
    <add key="LogConfigurationFile" value="C:\Program Files\Cleo Communications\RMCS\Communication
Server\Cleo.Rmcs.CommunicationServer.exe.log4net" />
    <add key="ListeningPort" value="7070" />
    <add key="ClientConnectPort" value="7071" />
    <add key="ServiceDirectory" value="C:\Program Files\Cleo Communications\RMCS\Communication Server"
/>
    <add key="ServerAddress" value="VMXPDEV" />
    <add key="MaxSpiders" value="5" />
    <add key="SocketListenerPort" value="7072" />
  </appSettings>
</configuration>
```

Configuration entries to note are:

Configuration Name	Description
ListeningPort	This is the Communication Server command port.
ClientConnectPort	This is the port used by the Terminal client to connect with the server.
SocketListenerPort	This is the port used by remote-initiated socket connections for dialing back into the Communication Server.
CacheExpiration	The communication server maintains a cache library scripts. By default, the communication server expires these scripts every 12 hours

	(12:00:00). You can override the expiration with this setting.
DialSpacing	The number of milliseconds between dialing on the modem hardware. This is used to space out calling on hardware that doesn't support simultaneous dialing. Default is 0.
PacketTimeout	The number of milliseconds to wait for a packet before timing out the connection. Default is 180000 (3 minutes).
ChallengeResponsePackets	The number of challenge packet attempts that are sent when a connection is made. When a valid response packet is received, no more challenges are sent. When the maximum number of challenge packets are sent without a valid response, the connection is an error and the line is dropped. Default is 40.
ChallengeResponseSpacingDelay	The number of milliseconds between challenge packets. Default is 500.
PacketFactoryMinPacketBlockSize	The minimum packet size in bytes. Default is 64.
PacketFactoryMaxPacketBlockSize	The maximum packet size in bytes. Default is 1024.
PacketFactoryCurrentPacketBlockSize	The starting packet size in bytes. Default is 512.
PacketFactoryPacketParserTimeout	The maximum number of milliseconds that it expects to be able to parse a packet in. Default is 45000 (45 seconds).
PacketFactoryPacketWindowSize	The packet window size for determining packet size switching. Default is 10.
PacketFactoryPacketErrorThreshold	The error threshold in the packet window where if the packet balance falls below this number, the packet size is reduced. Default is 7.
SendCommandTimeout	The timeout (in milliseconds) that the communication server will wait for a command to complete before giving up on the command. The default is 300000 (5 minutes). Increase this number if the communication server is timing out waiting for data from a busy job server.

If you modify any of the fields in the configuration, be sure to restart the Communication Server service.

Installing the RMCS Administration Site

The RMCS Administration is implemented as an ASP.NET web site. The installer supplies the UltiDev Cassini ASP.NET web server. If you don't plan on using this web server, the administration site should be installed on a computer with a web server that can serve up those pages.

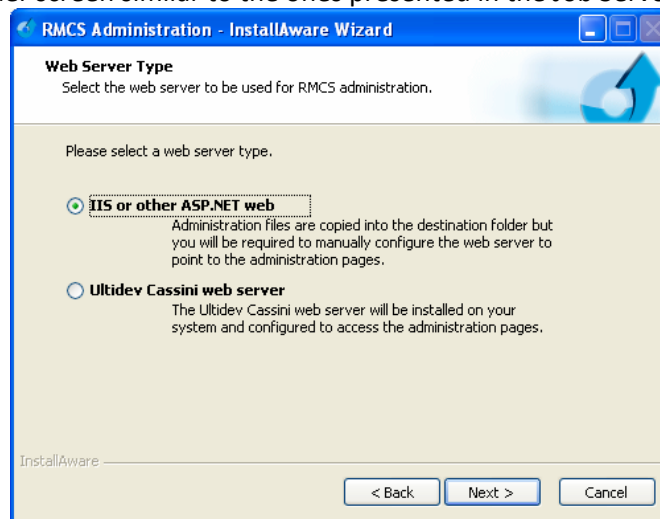
Prerequisites

You need the following prerequisites to install the RMCS Administration:

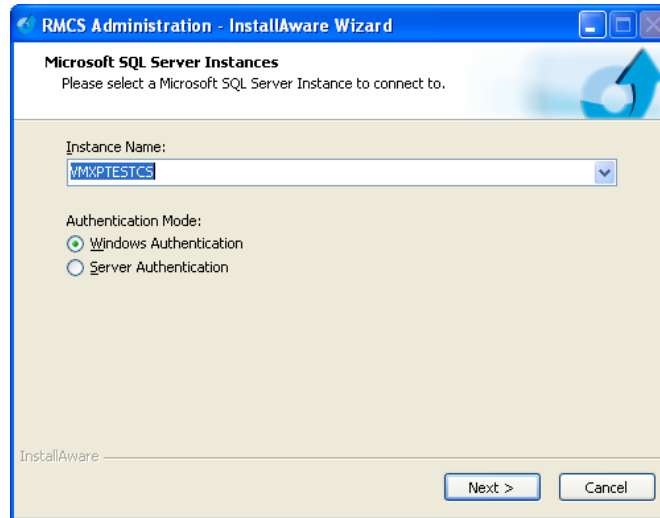
- Windows XP, Windows 2000, Windows Server 2003 or later
- Microsoft Installer 3.1
- .NET Framework 2.0

Installation

To install just the RMCS Administration, run the *Rmcsadministration.exe*. You'll be presented with a welcome screen and destination folder screen similar to the ones presented in the Job Server installation.

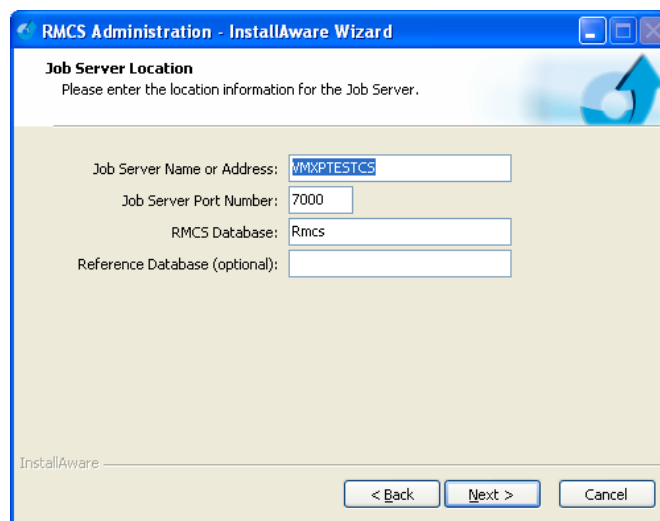


The web server type screen is used to specify the web server you plan on using. If you are using IIS, refer to the end of this section for additional configuration instructions. To install the Ultidev Cassini web server instead, select that option on this form.



The installation will scan for Microsoft SQL database servers and list the instances in the drop down. Select the instance and authentication information for the installed RMCS database.

(Help: If you have problems connecting to a SQL server instance on a different computer, make sure that SQL is configured to allow remote connections. Run the SQL Server Configuration Manager tool. The protocol TCP/IP should be enabled for the application to run correctly. You may need to enable Named Pipes and VIA for the installer to work correctly. Those options can be disabled again when the installer is complete.)



Enter the machine name or IP address of the Job Server instance. Specify the port for communicating with the Job Server. The default is port 7000.

Enter the name of the RMCS database that was installed. If a reference database is being used, enter the name of the reference database. The installer will verify the presence of the RMCS database. Click the Next button through the remaining screens to finish the installation.

Using Cassini

If you choose to install the Cassini web server, the application is automatically configured for port 8085. Access the application using the address `http://[machine or localhost]:8085` (i.e. `http://localhost:8085`).

Configuring IIS

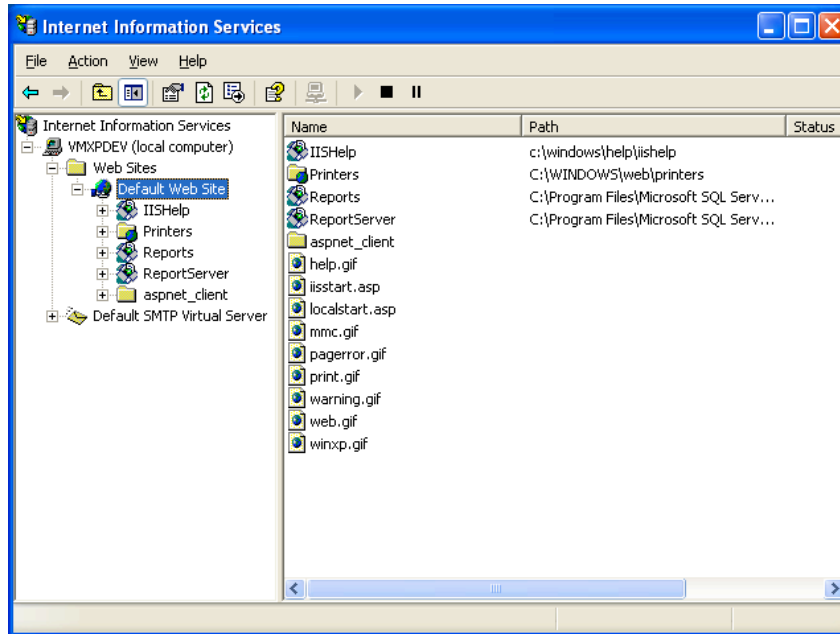
NOTE: Installing the Administration site DOES NOT configure IIS for use with that site! Configuring IIS or other web server will have to be done manually by your web administrator.

The following pieces of information will be required by your web administrator to correctly finish configuration of the administration site:

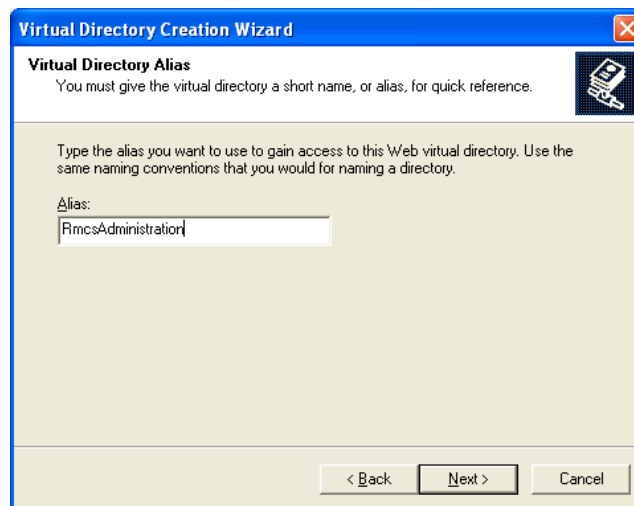
- 1) The directory where the administration files were installed.
- 2) The Web site or server needs to run with the permissions to read/update the RMCS database OR the connectionString in the Web.Config file needs to have a valid connection string with user credentials.
- 3) The Web.Config file is automatically configured during the installation. However, you may need to update it should permissions change. Specifically,
 - a. The appSettings ServerAddress key should have the name or IP of the job server machine. The installer does this for you.
 - b. The appSettings ListeningPort should contain the port specified for the Job Server command port. If the default value was used during Job Server installation, this value can remain unchanged. The installer does this.
 - c. The connectionStrings should contain a connection string with the name of the machine and a connection string for accessing the RMCS database.
 - d. The connectionStrings can also optionally contain a connection string with the name of the machine followed by “_ref” that points to a reference database containing other appliance data. (This is custom to the implementation.)

Configuring IIS on Windows XP

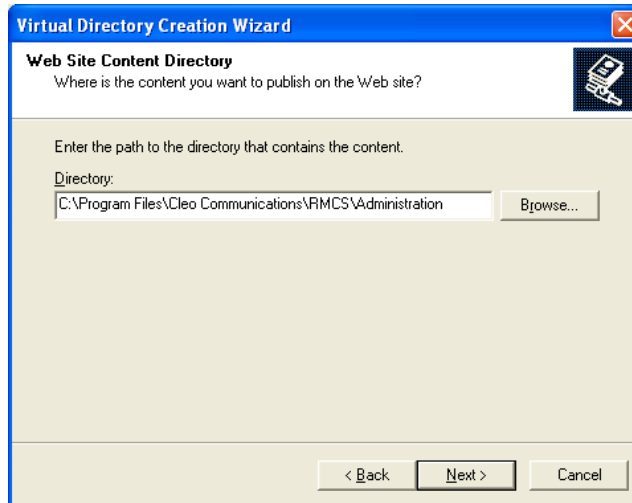
As an administrator user on the system run Internet Information Services.



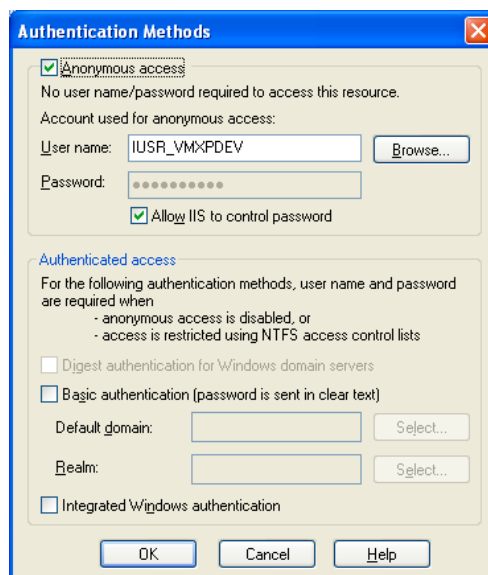
You can either change the default web site to point to the location of the web site (right click on Default Web Site, select Properties, select the Home Directory tab, and change the Local Path) or create a new virtual directory to point to the administration pages. To create a new virtual directory, right click on the Default Web Site and select New | Virtual Directory.



Enter a name for the virtual directory. This name will become part of the URL when accessing the administration site (i.e. http://localhost/RmcsAdministration).



Next select the location of the installed RMCS administration files. Click next through the permissions screen. After you see the new virtual directory listed in Internet Information Services tool, right click on the new virtual directory and select Properties. Click the ASP.NET tab and make sure that version 2.0.50727 is the selected ASP.NET version for this web. Then click on the Directory Security tab and click the Edit button in the Anonymous access and authentication control group.



In the account used for anonymous access, click Browse and enter the user id that has permissions to the SQL database. Uncheck the “Allow IIS to control password” and enter the password. Confirm the password and click OK. Click OK on all forms to accept dialog settings.

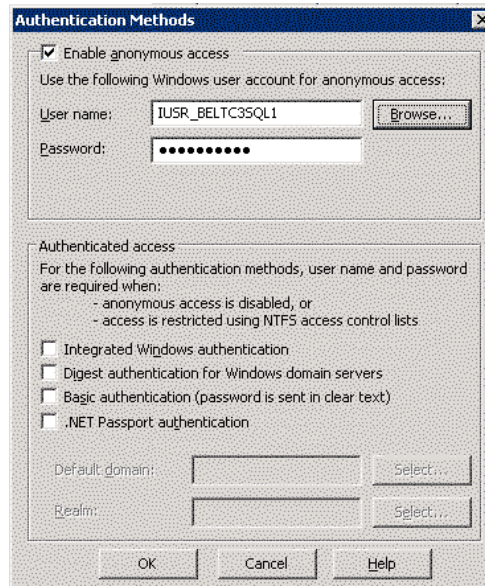
You can now access the site using your browser (i.e. <http://localhost/RmcsAdministration>). When you confirm that the site comes up, you can use the same URL in the options form of the RMCS Terminal application to bring up the web administration within the RMCS Terminal application.

Configuring IIS on Windows 2003 Server

The steps for configuring IIS on Windows 2003 Server are roughly the same as on Windows XP with a few notable exceptions:

- 1) Windows 2003 Server allows the addition of multiple web sites. Creating a new web site requires configuring some additional information (i.e. IP Address of site or host headers, DNS entries) that is beyond the scope of this document. Seek assistance from your web administrator or refer to IIS documentation for more information.

- 2) The Authentication Methods dialog looks a little differently but functions the same.



Installing the Terminal Application

The RMCS Terminal application is used to connect to remote machines with an interactive session for transferring files, entering commands, and performing updates.

Prerequisites

You need the following prerequisites to install the Job Server and RMCS database:

- Windows XP or later
- Microsoft Installer 3.1
- .NET Framework 2.0

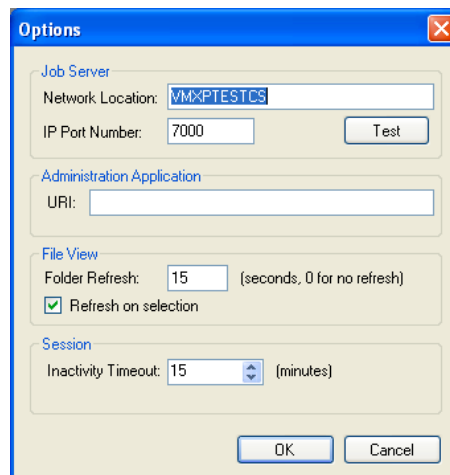
Installation

To install the RMCS Terminal, run Rmcsterminal.exe. Follow the installer instructions and select a folder to install the application into.

A “RMCS Terminal” icon will be created on your desktop and in the Start menu.

Configuring Terminal for Use

When the terminal is first run, it needs to be configured to connect to the Job Server and administration site. To do this, select Options from the File menu.



The screenshot shows the 'Options' dialog box with the following fields and controls:

- Job Server**
 - Network Location: VMXPTESTCS
 - IP Port Number: 7000
 - Test button
- Administration Application**
 - URI: (empty text box)
- File View**
 - Folder Refresh: 15 (seconds, 0 for no refresh)
 - Refresh on selection
- Session**
 - Inactivity Timeout: 15 (minutes)

At the bottom are OK and Cancel buttons.

On the options form, enter the network location of the Job Server and port number. Press the Test button to test connecting to the Job Server at that location.

In the URI field, enter the URI for the RMCS administration site (i.e. <http://localhost:8085> if using the Cassini web server). Click OK to save the settings. The inactivity timeout is the number of minutes that the application will stand idle before automatically disconnecting from a remote appliance.

Modifying Configuration

For detailed configuration of the Terminal server, you can modify the configuration for the Terminal application. Open the Terminal.exe.config file located in the specified install directory \RMCS Terminal.

Configuration fields to note are:

Configuration Name	Description
PacketFactoryMinPacketBlockSize	The minimum packet size in bytes. Default is 64.
PacketFactoryMaxPacketBlockSize	The maximum packet size in bytes. Default is 1024.
PacketFactoryCurrentPacketBlockSize	The starting packet size in bytes. Default is 512.
PacketFactoryPacketParserTimeout	The maximum number of milliseconds that it expects to be able to parse a packet in. Default is 45000 (45 seconds).
PacketFactoryPacketWindowSize	The packet window size for determining packet size switching. Default is 10.
PacketFactoryPacketErrorThreshold	The error threshold in the packet window where if the packet balance falls below this number, the packet size is reduced. Default is 7.

Installing the Remote Server

The Remote Server service installed on a remote machine allows the RMCS system to connect to that machine for remote administration, file transfers, and to run remote scripts.

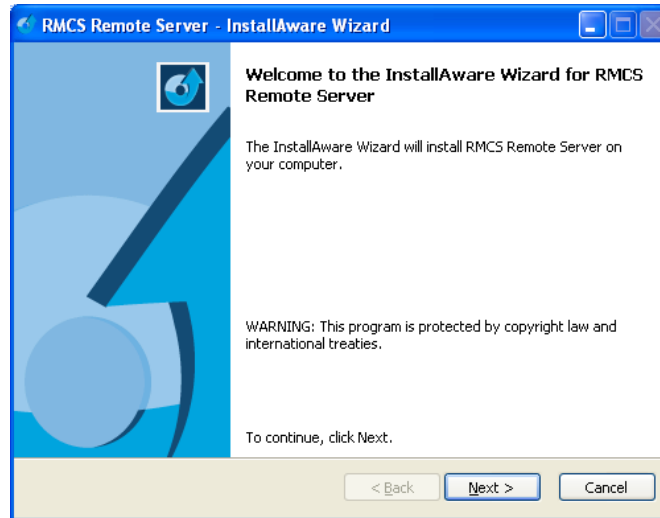
Prerequisites

You need the following pre-requisites to install the Remote Server:

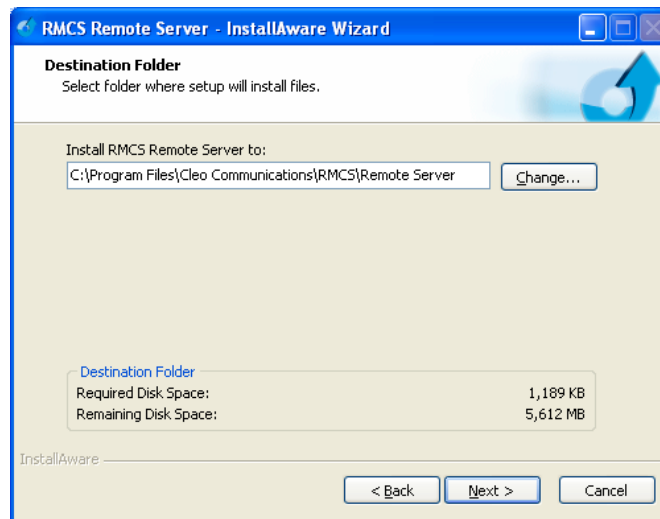
- Windows XP or Windows XP Embedded
- Microsoft Installer 3.1
- .NET Framework 2.0

Installation

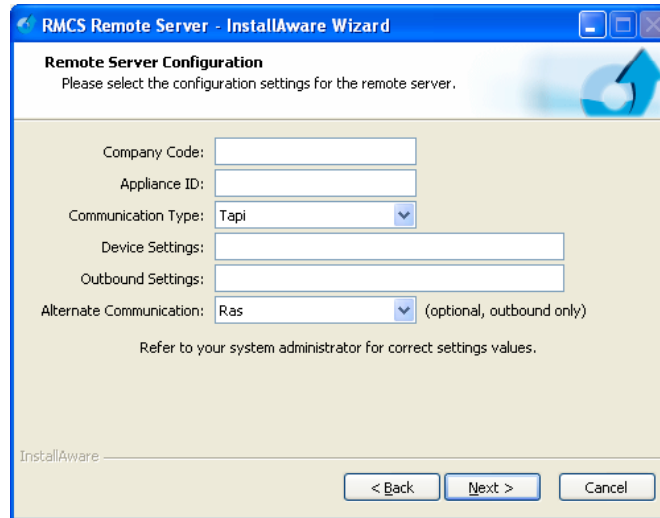
To install the Remote Server, run Rmcsremote.exe.



On the welcome screen, click the Next button.



Select the destination folder to install the Remote Server services files and click the Next button.



On the Remote Server Configuration screen, select the type of communication for the remote server.

The Company Code field is used for authentication. This needs to match the Company Code field specified for the Communication Server. If the company codes do not match a connection cannot be made with a remote appliance. The same code should be used for appliances in a system. Decide in advance what these codes should be.

The Appliance ID is used for appliance registration. This field is not required but, if entered, should match the Appliance Name entered in the administration.

The Communication Type specifies the technology used to connect to the remote server. If “Modem” is specified, specify the serial port settings in the Device Settings field. If “Socket” is specified, enter the address and port number in the Device Settings field. For Tapi (Telephony API) connections, the Device Settings field can be blank in most situations.

The Device Settings field is used to configure the serial port/modem or socket connection for incoming connections.

The Outbound Settings field is used to specify information to connect back to the Communication Server for remote-initiated connections. Settings consist of a series of name/value pairs of the form “name=value”. A semi-colon separates multiple settings.

Use the following serial port/modems settings to define a Modem connection:

Setting	Description
autoBaud	Set to “True” to cause the server to automatically adjust the serial port speed to just above the modem connection speed. Set to “False” to disable auto-bauding. Default is true.
baud	Set to the serial port baud rate.
comPort	Set to the COM port to use for the modem connection.
dataBits	Set to the number of data bits. Default is 8.
dialInit	Modem initialization string sent to the modem prior to dialing. (relevant to outbound

	settings)
dialTimeout	Number of seconds to wait before a dial attempt will be considered timed out. Default is 60 seconds.
handshake	Type of handshaking. Valid values are None, XOnXOff, RequestToSend, and RequestToSendXOnXOff. Default is RequestToSend.
init	Modem initialization string.
location or number or dial	Phone number for remote-initiated connections back to the Communication Server. (relevant to outbound settings)
parity	Serial port parity. Default is "N".
stopBits	Number of stop bits. Default is 1.

If no Device Settings are specified for a modem, the following settings are used:

```
comPort=COM1;baud=57600;handshake=RequestToSend;init=AT&C1&D1
```

Use the following settings to define a Socket connection:

Setting	Description
address or location	Machine name or ip address of the listening server. (For outbound settings, this is the IP/machine name of the Communication Server.)
port	Listening port. Default is 5000.
adapter	Instead of using the address or the machine name as the address to listen on, you can specify a specific adapter string or partial string to match on for the listener. Set 'adapter' equal to some portion of text that you want to match from your network adapter names.
monitorIPPeriod	The number of seconds between checks for the IP. If you're listening on an adapter or address name and the IP changes, the listener will monitor for a change in the dynamic IP address. The normal period for checks is 5 minutes (300 seconds). You can change this value to make checks more or less frequently.

If no Device Settings are specified for a socket, the following settings are used:

```
address=[machine name];port=5000
```

Use the following settings to define a Tapi connection:

Setting	Description
location or number or dial	Phone number for remote-initiated connections back to the Communication Server. (relevant to outbound settings)
device	Name of the Tapi device to connect to.

The Alternate Connection field is used to specify an alternate technology for dialing out if different from incoming connections. Set to "(none)" if the same connection technology is used for incoming and outgoing calls. For a RAS outgoing connection, specify socket settings for connecting to the communication server as the Outbound Settings.

Verification

To verify that the install completed successfully,

- 1) In the computer's Administration Tools, open Services. You should see the RMCS Remote Server service listed and started.
- 2) Check the log files in the directory where the service was installed. You should not see any errors listed in the log. If there are errors, check your configuration as specified in the next section.

Modifying Configuration

To change or modify the configuration for the Remote Server, open the Cleo.Rmcs.RemoteServer.exe.config file located in the specified install directory \RMCS Remote Server.

The configuration will look something like this:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <appSettings>
    <add key="LogConfigurationFile" value="C:\Program Files\Cleo Communications\RMCS\RMCS Remote
Server\Cleo.Rmcs.RemoteServer.exe.log4net" />
    <add key="ConnectionType" value="Modem" />
    <add key="Settings"
value="comPort=COM1;baud=57600;handshake=RequestToSend;init=AT&amp;C1&amp;D1&amp;S0" />
    <add key="OutboundSettings" value="" />
    <add key="ServiceDirectory" value="C:\Program Files\Cleo Communications\RMCS\RMCS Remote Server" />
    <add key="ScriptDirectory" value="C:\Program Files\Cleo Communications\RMCS\RMCS Remote
Server\Scripts" />
    <add key="ServerAddress" value="VMXPDEV" />
  </appSettings>
</configuration>
```

Configuration fields to note are:

Configuration Name	Description
ConnectionType	Type of connection. This can be "Tapi", "Modem" or "Socket".
Settings	Listening settings, see above.
OutboundSettings	Settings for remote-initiated connections
AltConnectionType	Alternate connection used for outbound connections. This can be "Tapi", "Modem", "Socket", or "Ras". Only specify if outgoing connections are different from incoming connections.
CompanyCode	The code used for authentication with the Communication Server. This must match the code specified in the Communication Server and is used to authenticate the connection with the Communication Server.
ApplianceId	This is the appliance identifier for this appliance. Used during the appliance registration process.
RmcsCallerId	(Tapi only) Header string identifier to indicate that the call is to be answered by the remote server. Default value is "CleoZqT%6W51&". (Non-typical displayable bytes can be escaped using \nnn to specify the byte value.)
EnableCallerId	(Tapi only) Whether to use the caller id as an identifier for the remote server to answer the call. Default is true.
PacketTimeout	Number of milliseconds in which a packet is expected before it can be assumed the connection is dead and the server times out. The server will drop a connection after a timeout. Default is 2 minutes (120000).

ChallengeResponsePackets	The number of challenge packet attempts that are sent when a connection is made. When a valid response packet is received, no more challenges are sent. When the maximum number of challenge packets are sent without a valid response, the connection is an error and the line is dropped. Default is 40.
ChallengeResponseSpacingDelay	The number of milliseconds between challenge packets. Default is 500.
WaitToStartupTime	The number of milliseconds after the service starts up to wait before initializing the communication system. Default is 5000.
PacketFactoryMinPacketBlockSize	The minimum packet size in bytes. Default is 64.
PacketFactoryMaxPacketBlockSize	The maximum packet size in bytes. Default is 1024.
PacketFactoryCurrentPacketBlockSize	The starting packet size in bytes. Default is 512.
PacketFactoryPacketParserTimeout	The maximum number of milliseconds that it expects to be able to parse a packet in. Default is 45000 (45 seconds).
PacketFactoryPacketWindowSize	The packet window size for determining packet size switching. Default is 10.
PacketFactoryPacketErrorThreshold	The error threshold in the packet window where if the packet balance falls below this number, the packet size is reduced. Default is 7.

Unattended/Silent Installation

Installation

To install silently, pass /s on the command line along with values for the dialog entries in the form name=value.

Variable	Description
TARGETDIR	The directory where the remote server is installed. Default is \$PROGRAMFILES\Cleo Communications\RMCS\Remote Server.
REMOTECONNECTTYPE	This is the connection type for incoming calls (and outgoing calls if the ALTREMOTECONNECTTYPE is NOT specified). Default is "Tapi". Valid values are "Modem", "Socket", and "Tapi".
ALTREMOTECONNECTTYPE	This is the connection type for outgoing calls if different from incoming calls. The default is "Ras". Valid values are "(none)", "Modem", "Socket", "Tapi", and "Ras".
DEVICESETTINGS	These are incoming connection settings. Default is empty.
OUTBOUNDSETTINGS	There are outgoing connection settings. Default is empty.
COMPANYCODE	This is the company code used for authentication. Default is empty.
APPLIANCEID	This is the appliance id for the appliance. Default is empty.

Example:

```
Rmcsremote /s REMOTECONNECTTYPE=Socket ALTREMOTECONNECTTYPE=(none)  
COMPANYCODE=cleo08 APPLIANCEID=c11240
```

Uninstall

To uninstall silently, use the following command line:

```
Rmcsremote /s MODIFY=FALSE REMOVE=TRUE UNINSTALL=YES
```

Post Installation Notes

Please read and be aware of the following issues in order to successfully use the RMCS system:

- The job server will create a database with a single user account (userid: *administrator*, password: *rmcsadmin*). It is highly recommended that one of the first tasks performed is to specify a new administrator password. This can be done by logging in as the administrator in the web administration and going to the Settings | User Preferences screen.
- Depending on your installation, the job server may or may not install a set of scripts and jobs for you. In order to use the interactive connection capabilities of the terminal client, you must have a job called "Interactive". If you do not have Interactive script(s) defined, Cleo can provide those for you.
- Refer to the RMCS User's Guide for configuring the RMCS system. Before general use, device hardware, communication server(s), appliances, user accounts, and permissions must all be defined.
- Refer to the CUEScript Developer's Guide and RMCS Developer's Guide for additional assistance on writing job scripts. If you need example scripts or support in writing scripts, please contact Cleo support.