

# Codonics Virtua Query/Retrieve Kiosk Mode

### Overview

The Codonics Virtua Query/Retrieve Kiosk Mode feature provides a flexible, configurable solution for enabling non-radiology clinicians to record studies to disc based on only key information about the study, such as the accession number. The Virtua administrator can restrict which fields certain Virtua users may query when using the existing Virtua Query/Retrieve interface. By allowing the Virtua administrator to minimize the chances of non-radiology clinicians querying for studies they do not know the key information for, both the radiology department and non-radiology clinicians can achieve their goals.

**CAUTION:** The Query/Retrieve Kiosk Mode feature provides access to sensitive patient data. Access to Virtua should be restricted to clinical personnel only.

### Prerequisites

Confirm that each of the following items is available:

- ◆ Kiosk Mode requires a feature key on Virtua's SmartDrive. Contact Codonics Technical Support or your Codonics Representative to obtain the proper key.
- ◆ 4.2.0 software or later is installed on Virtua.
- ◆ Connection information for PACS

### Setting Up Kiosk Mode

Kiosk Mode is configured through multiple profiles on the SmartDrive:

- ◆ User Profiles
- ◆ Query Criteria Profiles
- ◆ QRSCU and QRSCP Profiles
- ◆ Job Profiles

A default configuration for Kiosk Mode is provided by the profiles on the SmartDrive in the specified subfolders:

- ◆ profiles\user\user.kiosk.txt
- ◆ profiles\dicom\qrscp.default.txt
- ◆ profiles\dicom\qrscu.default.txt
- ◆ profiles\dicom\queryCriteria.kiosk.txt
- ◆ profiles\job\job.autoKiosk.txt
- ◆ profiles\system.txt

This default configuration must be modified in at least the following ways to work in a hospital environment:

- ◆ The following parameters in **profiles\dicom\qrscp.default.txt** must be set to values for an existing PACS:
  - ◆ **scp\_ae\_title = QR\_SERVER\_AE**
  - ◆ **scp\_ip\_address = QR\_SERVER\_IP**
  - ◆ **scp\_port = QR\_SERVER\_PORT**
- ◆ The following parameters in **profiles\dicom\qrscu.default.txt** must be set to values for an existing PACS:
  - ◆ **calling\_ae\_title = VIRTUA\_QR\_SCU**
  - ◆ **destination\_ae\_title = VIRTUA\_DEST\_AE**
- ◆ **profiles\job\job.autoKiosk.txt** must be renamed to match the value used in **profiles\dicom\qrscu.default.txt** for the **destination\_ae\_title** parameter. For example, the **destination\_ae\_title** is set to **virtua\_cd** then **job.autoKiosk.txt** should be renamed to **job.virtua\_cd.txt**. This way, when a study is received from the PACS with the called AE title **virtua\_cd**, Virtua will use the settings in the **job.virtua\_cd.txt** profile to automatically record that study to a CD and then delete the study after it finishes recording.

Unless further modified by the Virtua administrator, this default configuration will allow a non-radiology clinician to log in to Virtua as the user 'kiosk' and have access to a restricted querying interface that supports using only the Accession Number of a study. When the non-radiology clinician selects a study to Retrieve, the PACS will send that study to the Virtua and the Virtua will auto-record that study, then delete the study once it finishes recording.

See the Profile Settings section for further information on setting up profiles to create a Kiosk Mode on Virtua.

### Profile Settings

The following User Profile parameter has been added to all of the user profile configuration files on the SmartDrive:

Parameter:	<b>queryCriteriaConfiguration</b>
Settings:	<b>Profile Name</b>
Default:	<b>default</b>

Description: The name of a Query Criteria Configuration profile to use when this user logs in to the Virtua. This Query Criteria Configuration profile will determine what fields this user is allowed to query from the Query/Retrieve tab.

The new Query Criteria Configuration profiles are located in the SmartDrive directory **\profiles\dicom\queryCriteria.XXX.txt**.

The following set of 3 parameters is contained once for each of the 5 fields that Virtua can query on (PatientName, PatientId, PatientDob, AccessionNumber, and StudyDate) in the new Query Criteria Configuration profiles in the **\profiles\dicom\queryCriteria.XXX.txt** files on the SmartDrive.

Parameter: **is<QueryField>Allowed**  
Settings: **true or false**  
Default: **false**  
Description: Determines if a user associated with this Query Criteria Configuration profile is able to enter a value for the <QueryField> in the Query Criteria dialog.

Parameter: **is<QueryField>Required**  
Settings: **true or false**  
Default: **true**  
Description: Determines if a user associated with this Query Criteria Configuration profile must enter a value for the <QueryField> in the Query Criteria dialog in order for the query to proceed.

Parameter: **is<QueryField>Exact**  
Settings: **true or false**  
Default: **true**  
Description: Determines if a user associated with this Query Criteria Configuration profile may enter any wildcard characters (\*, ?) in the value for the <QueryField> in the Query Criteria dialog.

### **Example 1:**

isPatientNameAllowed = **true**

isPatientNameRequired = **true**

isPatientNameExact = **false**

With this configuration, the user must enter a value for the Patient Name field on the Query Criteria dialog in order for Virtua to perform a query. They may not enter a blank value, though they may enter wildcard characters (\*, ?).

### **Example 2:**

isAccessionNumberAllowed = **true**

isAccessionNumberRequired = **false**

isAccessionNumberExact = **true**

With this configuration, the user may enter a value for the Accession Number field on the Query Criteria dialog, though it is not required in order for Virtua to perform a query. They may enter a blank value, but they may not enter wildcard characters (\*, ?).

The following additional Query Criteria Configuration Profile parameters are available in the new Query Criteria Configuration profiles in the **\profiles\dicom\queryCriteria.XXX.txt** files on the SmartDrive.

Parameter: **allowEditQrscuOptions**  
Settings: **true or false**  
Default: **false**  
Description: Specifies whether a user associated with this Query Criteria Configuration profile may click the Edit Options button in the Edit Q/R Options section of the Query Criteria dialog.

Parameter: **clearQueryResultOnRetrieve**  
Settings: **true or false**  
Default: **true**  
Description: Specifies whether the values entered in the Query Criteria dialog and the results listed on the Query/Retrieve tab will be automatically cleared after a Retrieve operation is performed by a user associated with this Query Criteria Configuration profile.

**NOTE:** It is recommended to set the Job Profile parameter "postProcessingAction" to "Delete" in the appropriate **\profiles\job\job.XXX.txt** files on the SmartDrive. This will prevent another user from having access to a study to re-record it after a non-radiology clinician has recorded it.

**NOTE:** It is recommended to set the System Profile parameter "autoLogoutIdleDelay" to a small number of seconds, such as "120" in the **\profiles\system.txt** file on the SmartDrive. This will automatically log out a non-radiology clinician user if they forget to log out manually.

The following is a sample Query Criteria Configuration Profile:

<b>queryCriteria.kiosk.txt</b>
<b>isPatientNameAllowed = false</b>
<b>isPatientNameRequired = true</b>
<b>isPatientNameExact = true</b>
<b>isPatientIdAllowed = false</b>
<b>isPatientIdRequired = true</b>
<b>isPatientIdExact = true</b>
<b>isAccessionNumberAllowed = true</b>
<b>isAccessionNumberRequired = true</b>
<b>isAccessionNumberExact = true</b>
<b>isPatientDobAllowed = false</b>
<b>isPatientDobRequired = true</b>
<b>isPatientDobExact = true</b>
<b>isStudyDateAllowed = false</b>
<b>isStudyDateRequired = true</b>
<b>isStudyDateExact = true</b>
<b>allowEditQrscuOptions = false</b>
<b>clearQueryResultOnRetrieve = true</b>

### **Non-Radiology Clinician Workflow**

When a non-radiology clinician logs in to the Virtua (either as the built-in 'kiosk' user or as a user setup by the Virtua administrator), they should navigate to the Query/Retrieve tab on the Studies screen and press the Query button in order to query from a PACS.

If any of the **is<QueryField>Allowed** parameters are set to false in the Query Criteria Configuration profile associated with the logged-in user, the Query Criteria dialog will disable the input text box for that field.

#### **Example:**

isPatientNameAllowed = false

isPatientIdAllowed = false

isAccessionNumberAllowed = true

isPatientDobAllowed = false

isStudyDateAllowed = true

In this configuration, the Query Criteria dialog will disable the input boxes for the Patient Name, Patient ID, and Patient DOB fields, but the input boxes for Accession Number and Study Date will be enabled and usable.

If any of the **is<QueryField>Required** parameters are set to true in the Query Criteria Configuration profile associated with the logged-in user and any of those fields are blank, an error will be shown when the user performs a query. The input boxes for the fields that are required will be highlighted in red for the user to fill in appropriately.

If any of the **is<QueryField>Exact** parameters are set to false in the Query Criteria Configuration profile associated with the logged-in user and any of those fields contain wildcard characters (\*, ?), an error will be shown when the user performs a query. The input boxes for the fields that may not contain wildcard characters will be highlighted in red for the user to fill in appropriately.

**NOTE:** Different PACS may handle queries for exact or wildcard values differently, especially regarding Patient Name. It is suggested to confirm the behavior of exact and wildcard searches for all fields being queried with your PACS.

### **Technical Support**

If problems occur that are not covered by this Technical Brief, contact Codonics Technical Support between the hours of 8:30AM and 5:30PM EST (weekends and U.S. holidays excluded).

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Website: www.codonics.com

*Get it all with just one call*  
**800.444.1198**

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