



Technical Publication

ViewPoint

Technical Reference Guide

Interface for Client

Context Sharing

Version 3.0



Imprint

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Trademarks

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Scope and Audience

The audience of this document are third party products technicians and ViewPoint field engineers.

This document describes the use of the Client Context Sharing as an integration basis between a ViewPoint system and a third party system.

It is assumed that the audience of this document is familiar with the ViewPoint product and with Microsoft batch programming.

Introduction

The Client Context Sharing is based on VPInterface. VPInterface is an executable file placed in the 'VPCCommon' directory. It is part of the standard installation of ViewPoint.

VPInterface provides a way for third party applications to communicate with a ViewPoint installation on the local computer.

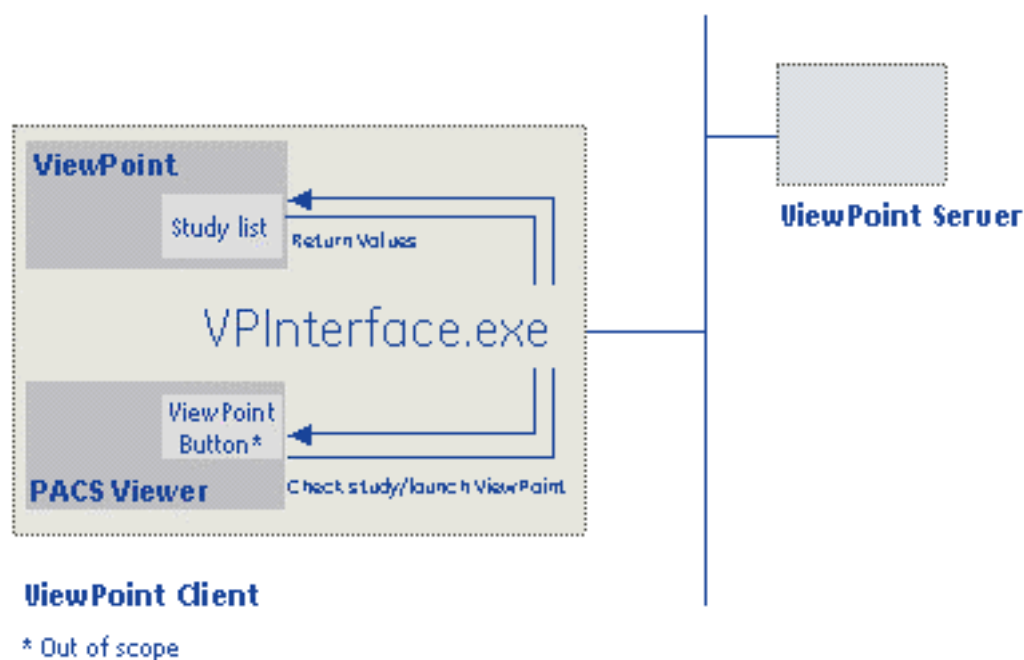


Fig. 1 Example of Client Context Sharing concept

By calling VPInterface.exe with the corresponding parameters, any application can:

- Query if a certain DICOM study, patient or hospital case is available in the ViewPoint database.

- Start ViewPoint (or – if already running- brings it to the foreground) and enable the user to open a certain DICOM study or examination with a minimal amount of mouse clicks or keyboard interactions.

VPInterface.exe delivers return values. It is up to the calling application to react accordingly to those values. The integration may also request engineering development in the third party system. This effort is out of the scope of ViewPoint Bildverarbeitung GmbH.


Requirements

ViewPoint 5.6.7 or higher must be installed and operative on the ViewPoint client computer.

For using patient match ID or hospital case ID an interface to the Hospital Information System (HIS) is required.

The third party system to integrate with ViewPoint must also be installed on the ViewPoint client computer.

Installation

 <p>Warning</p>	<p>Danger of False Diagnosis!</p> <p>If the Client Context Sharing data interface has been installed from any Third Party System, for example a PACS, to ViewPoint:</p> <p>Misconfiguration of the data interface might cause incorrect data to be transferred to the ViewPoint system. As a result ViewPoint will display wrong patient data.</p> <p>Test the interface after installation. In particular, double-check that the correct identification data is transferred to the ViewPoint system. (SN 24)</p>
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The installation of ViewPoint is out of the scope of this document; please refer to the ViewPoint installation guide or contact the ViewPoint support team.

For better integration and minimal user interaction with the client context sharing for using 'suid' parameter, configure ViewPoint with the study list open after clicking the examination door (for details see the Installation and Configuration Manual, chapter: Setting up the patient list).

For using the hospital case ID, configure the patient list to display the hospital case number (for details see the Installation and Configuration Manual, chapter: Setting up the patient list).

Additionally, customers may be interested in enabling dual monitor display or displaying images and reports in a split screen.

The installation of the third party system is out of scope of this document.

VPInterface.exe Usage and Syntax

All third party systems capable of running external application or batch scripts can integrate with ViewPoint through the use of VPInterface.exe.

Typically, those systems should provide a configuration user interface 'UI' to enter the path to VPinterface.exe. The third party system should generally provide a UI to the user to decide when to run VPInterface.exe depending on its particular workflow.

VPInterface.exe is a command line tool that can be called with the following syntax:

```
VPInterface.exe <command>/parameter1 value1 [/parameter2 value2...]
```

Syntax information can be displayed by typing: `vpinterface -?`

Examples:

```
VPInterface.exe lookup /suid 1.2.246.352.43077212.2.2252.596
```

```
VPInterface.exe display /suid 1.2.246.352.43077212.2.2252.596
```

Command	Comment
lookup	<p>Checks whether the given study, patient or hospital case exists in the ViewPoint database or not. Requires parameter suid, patmid or caseid.</p> <p>Return values: 0: study does not exist 1: study exists but does not have 3D/4D data 2: study exists with 3D/4D data 3: patient or hospital case does exist -1: ViewPoint client is not installed -2: unable to connect to the database -3: patient or hospital case does not exist</p>

display	<p>Displays the given study, patient or hospital case in ViewPoint. Requires parameter suid, patmid or caseid.</p> <p>Return values: 0: study does not exist 1: study exists but does not have 3D/4D data 2: study exists with 3D/4D data 3: patient or hospital case does exist -1: ViewPoint client is not installed -2: unable to connect to the database -3: patient or hospital case does not exist</p>
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Table 1: Description of the commands

Parameter	Value	Comment
suid	DICOM study UID	UID of the study, which shall be displayed by ViewPoint
patmid	Patient match ID	Match ID of the patient, which shall be displayed by ViewPoint
caseid	Hospital case ID	Hospital case ID of the case, which shall be displayed by ViewPoint.
bname	String	Defines the name of the button in ViewPoint. The default name is VPInterface.

Table 2: Description of the parameters

The 'lookup' command provides information about the DICOM study, patient or hospital case in the ViewPoint database by setting the environment variable %ERRORLEVEL% to one of the following values.

%ERRORLEVEL% values	Meaning
0	The DICOM study does not exist.
1	The DICOM study does exist, but does not contain 3D/4D data.
2	The DICOM study does exist and contains 3D/4D data.
3	The patient exists in ViewPoint.
-1	The ViewPoint client is not installed.
-2	System error
-3	The patient does not exist in ViewPoint.

Table 3: Description of the Errorlevel values

The 'lookup' command is typically used to display additional information to the user in the third party system UI. This could be, for example, whether a selected DICOM study is present in the Viewpoint system and whether there is 3D/4D data available that the customer could be interested in.

The 'display' command returns exactly the same values as the *lookup* one, but additionally launches the ViewPoint application (or – if already running- brings it to the foreground).

Working with the Study List

For working with the study list use the 'suid' parameter. With the 'lookup' command, for example, a third party PACS could display a study list view so the user can scroll up and down and select any DICOM study in the list. By using VPInterface and attending to its returned value in %ERRORLEVEL%, the PACS can present the button enabled or disabled. This depends on whether the corresponding DICOM study exists in the ViewPoint database or not, or whether it contains 3D/4D DICOM data or not. If the user clicks the button, the PACS can launch VPInterface with the command display (explained below) to bring the ViewPoint application to the front. The user can then continue to work on the selected study, but this time within ViewPoint.

Using the 'display' command with 'suid' parameter the ViewPoint application is launched (or - if already running - brings it to the foreground). In the ViewPoint study list there is a new button:



Fig. 2 Example of button in ViewPoint study list

By pressing it (shortcut F9), ViewPoint will either display the examination the DICOM study belongs to, or –if the study is not assigned- display the images of the study.

After pressing the button it will be hidden until a new DICOM study is selected through VPInterface.

The default label text of this button is 'VPInterface'. A user specific label text can be configured. To configure the user specific label text the 'bname' parameter has to be added to the display command. The new label text will be assigned after restart of ViewPoint. Otherwise the default label text is used.

The syntax of the 'bname' parameter is:

```
VPInterface.exe display /suid <study instance UID> /bname <new label>
```


Working with the Patient List

For working with the patient list use the 'patmid' or 'caseid' parameter.

With the 'lookup' command you can check whether the requested patient, identified by 'patmid' parameter, or the requested hospital case, identified by 'caseid' parameter, exists in the ViewPoint database.

Using the 'display' command the ViewPoint application is launched (or - if already running - brings it to the foreground). In the ViewPoint patient list there is a new button:

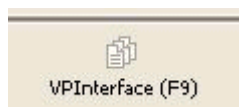


Fig. 3 Example of button in Viewpoint patient list

By pressing it (shortcut F9), ViewPoint will display the examination data of the respective patient or hospital case.

If the patient list is active or a patient record is loaded when the display command is executed, ViewPoint will switch to the new patient record automatically. Depending on where the already loaded patient record has been opened, e.g. Archive or FetaDoc, the new patient record will be opened in the same location.

After pressing the button it will be hidden until a new patient or hospital case is selected through VPInterface.

The default label text of this button is 'VPInterface'. A user specific label text can be configured. To configure the user specific label text the 'bname' parameter has to be added to the display command. The new label text will be assigned after restart of ViewPoint. Otherwise the default label text is used. The syntax of the 'bname' parameter is:

```
VPInterface.exe display /patmid <patient match ID > /bname <new label>  
or  
VPInterface.exe display /caseid <hospital case ID > /bname <new label>
```