



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Electronic Health Record

(EHR)

Installation/Configuration Guide CCD/C32 Component

Version 1.1 Patch 9 November 2011

Office of Information Technology (OIT) Division of Information Resource Management Albuquerque, New Mexico

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1.0 Introduction

There are three registered components for the C32/KMR viewer capability. They are:

- BEHCCDC32.BEHC32Button (C32 Viewer Launch Button)
- BEHCCDC32.BEHKmrButton (KMR Viewer Launch Button)
- BEHC32Service.BEHC32TcpService (C32 Viewer Listening Service)

The buttons are designed to be placed on the main screen header bar (where Patient, Visit, Encounter, and so on are located).

1.1 C32 Viewer Launch Button

This button launches the viewer display form as a separate window providing the target Ensemble C32 service URL. The display form initiates a request to the target Ensemble C32 service, indicating the reply is to be handled by the C32 Viewer Listening Service. It awaits the response retrieved by the Listening service. The response is displayed.

1.2 KMR Viewer Launch Button

This button launches the viewer display form for the KMR NHIN Inbox as a separate window providing the target KMR service URL. The display form initiates a request to the target KMR service handling the response directly to the viewer screen.

1.3 C32 Viewer Listening Service

This service listens on a dynamic port of the local machine for C32 responses from the Ensemble C32 provider service. It passes events, C32Data, and or C32Errors to the viewer display form for display of the data or error as needed.

2.0 Installation

The viewer support functions are installed and registered with IHS EHR Version 1.1 Patch 9 (CareVue OpenVista RC5). Refer to the appropriate KIDS build and notes for additional information.

2.1 Viewer Component Details

2.1.1 C32 Viewer Launch Button

This component has the following installed configuration:

Programmatic Identifier	BEHCCDC32.BEHC32Button
Version	1.0.3.10
Class Identifier	{A03F898E-D8D3-4817-8E4B-009D61B55327}
Image File	
Property Initializations	none
Serializable Properties	SiteUrl=TEXT, CAPTION=TEXT, BACKGROUNDCOLOR=COLOR
Required Files	BEHCCDC32.dll BEHC32Client.dll BEHC32Support.dll ccd.xsl xml.xsl
Dependencies	BEHC32SERVICE.BEHC32TCPSERVICE
Security Keys	CCDVIEWER, CCDSAVE, CCDPRINT
Multiple Instances Allowed	no
Internal Property Editor	no
All Keys Required	no
Hidden from Property Editor	no
Side-by-Side Versioning	no
Service	no
.Net Component	yes
Associated Build	BEHO*1.1*056001

Note: If the site uses Terminal Services for Remote Desktop Access to the server for session operation, create a directory C:\C321 on the Terminal Services server, *giving full control to the Windows Users or Group that will be using the CCD Viewer support.* If the users do not have sufficient permissions, the application will fail. Otherwise, there are no specific implementation or maintenance tasks associated with this component.

2.1.2 KMR Viewer Launch Button

Programmatic Identifier	BEHCCDC32.BEHKMRButton
Version	1.0.3.6
Class Identifier	{263D1CEE-9661-490e-96DD-6313A67BA502}
Image File	
Property Initializations	none
Serializable Properties	SiteUrl=TEXT, CAPTION=TEXT, BACKGROUNDCOLOR=COLOR
Required Files	BEHCCDC32.dll
Dependencies	none
Security Keys	None – user must be a member of the Provider class
Multiple Instances Allowed	no
Internal Property Editor	no
All Keys Required	no
Hidden from Property Editor	no
Side-by-Side Versioning	no
Service	no
.Net Component	yes
Associated Build	BEHO*1.1*056001

This component has the following configuration:

There are no specific implementation or maintenance tasks associated with this component.

¹ This directory is used to hold encrypted CCD documents for sessions while the documents are active in a viewer.

2.1.3 C32 Viewer Listening Service

This component has t	the following configuration:
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Programmatic Identifier	BEHC32Service.BEHC32TcpService
Version	1.0.3.8
Class Identifier	{B2CE30B4-D711-45d4-AEEB-420A14465B55}
Image File	
Property Initializations	none
Serializable Properties	none
Required Files	none
Dependencies	none
Security Keys	none
Multiple Instances	no
Allowed	
Internal Property Editor	no
All Keys Required	no
Hidden from Property	no
Editor	
Side-by-Side Versioning	no
Service	yes
.Net Component	yes
Associated Build	BEHO*1.1*056001

There are no specific implementation or maintenance tasks associated with this component.

2.2 C32 Workspace

The CCD/C32 support uses a directory, C:\C32, as its workspace to hold encrypted XML and HTML files used by the viewer while a given patient record is being viewed.

This directory must have its security setting set to Full Control for the Windows user accessing C32 support. If the session access is via RDP/Terminal Services to the server, the server needs this configuration. If the access runs the EHR session on a local machine, the user needs the control for the C:\C32 directory of the local machine. If the user(s) do not have sufficient permissions, the application will fail.

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3.0 Template Configuration

3.1 C32 Viewer Launch Button

The C32 launch button provides a number of properties that can be set as desired and some to be set to configure the instance of the service.

The properties are shown in the Figure 3-1.

Patient not selected		ot selected SUPER	Primary Care Te	eam Unassigned Pharm 🛣 🗟 Si No	co	KMR
tifications for All Patients			1997			1
PATIENT FOUR A				Order requires electron	10-Sep-2010 15 USE	Legend Priority
tient: PATIENT FOUR A.CPC	DEAMB (20025)	Descention	s for C32 Viewer La		23Sep-2010 13 USE	Low
bject: Order requires electron nder: USER SUPER	NIC			13.Sep-2010 15 USE	🔾 Među	
livered 10-Sep-2010 15:30			Property	Value	29-Aug-2010 21: USE	High
Piority: High Type: Actionable Can Delete: Yes		TOP		0	29-Aug-2010 22 USE	0
		LEFT		0	29Aug-2010 22 USE	Into Only
				52	29Aug-2010 21: USE	
CHARLES MICHAE		HEIGHT		p2	13-Sep-2010 16 USE	1
TAYLOR, CHRISTIN	ICU ICU-1	WIDTH		75	28-Jan-2011 12:36 USE 24-Aug-2010 06 USE	
PATIENT TWO A.D.	100 100-1	ALIGN		None	03Aug-2010 07 USE	
PATIENT SIXACP	ICU ICU-3				24 Aug 2010 13 USE	
TEST, EMILY ROSE	MEDICAL	ANCHOR	5	V Top; Lett	24-Nov-2010 11: USE	
JOHNSON, ESTHE		SiteUrl		http://127.0.0.1:57772/csp/c32ps/BJMD.Prod.	03-Dec-2010.09 USE	
JOHNSON, ESTHE		CAPTION	16	loco .	07-Dec-2010 00 USE	
JOHNSON, ESTHE				-	07-Dec-2010-02 USE	
JOHNSON, ESTHE		BACKGR	DUNDCOLOR		07-Dec-2010.02 USE	
JOHNSON,ESTHE					07-Dec-2010 02 USE	
STONE JOHNATH	1011				29-Aug-2010 21: USE	Process
TALBOT MARY (9 TALBOT MARY (9	ICU				14-Sep-2010 09 USE 14-Sep-2010 09 USE	1000
TOLIVER ANN (3.	DEMO IHS CLI	NIC		1	13.Sep-2010.14 USE	Al 🌼
TOLIVER ANN 19.	DEMO IHS CLI				13/Sep-2010 16: USE	Select
TOLIVERANN (9.	DEMO INS CU	Contraction and Contraction			13-Sep-2010 16 USE	
TOLIVERANN (9	DEMO IHS CU	C STOCKET IN CONTRACTOR			13-Sep-2010 21: USE	Info Di
TOLIVER ANN (9	DEMO IHS CU	NIC	OK	Cancel Apply	14-Sep-2010 10 USE	
BARNABY JONAS					29Aug-2010 22 USE	🖻 Forma
FUNT,ROBERT (Imaging Results: CHE	09-Sep-2010 10 USE	
FUNT, ROBERT (Imaging Results: CHE	09-Sep-2010 10 USE	X Delet
SIMPSON,BARBAR SIMPSON BARBAR				New consult EKG (Ro Completed Consult EKG	28-Sep-2010 11 USE 28-Sep-2010 11 USE	Show Al

Figure 3-1: C32 Viewer Launch Button Properties

The SiteUrl property is used to define the Ensemble C32 pull service location. The Site URL is the address of the Ensemble pull service. The location is the Ensemble/Cache server that your session is or will be using. For example, Projwin09-ihs would look like:

http://projwin09ihs.medsphere.com:57772/csp/c32ps/BJMD.Prod.Service.DocumentRepository.cls The *c32ps* portion of the URL is the Ensemble namespace that is mapped to the EHR namespace in use. EHR: WOCRT must map to C32WOCRT in the Site URL. For example:

http://projwin09-

ihs.medsphere.com:57772/csp/C32WOCRT/BJMD.Prod.Service.DocumentRepositor y.cls

The default port for Ensemble Web Services is 57772. However, if a site is running multiple instances of Ensemble, the correct port number may be 57773 or 57774/5/6/, etc. Check with your site administrator if in doubt.

3.2 KMR Viewer Launch Button

The C32 launch button provides a number of properties that can be set as desired and some to be set to configure the instance of the service.

The properties are shown in the Figure 3-2.

atient not selected	Visit not select USER, SUPER	cted Primary	Care Team Unaccigned Pharm 🐮 🗟 🗐 No	CCD	KMR
tilications for All Patients					<u></u>
					Legend
PATIENT FOUR A		Properties for KMR N	HIN Viewer Launcher Button	10-Sep-2010 15 USE.	
PATIENT,D (20072) ICU	IN THIS CLINIC			23.Sep-2010 13 USE. 13.Sep-2010 15 USE.	
BARNARY JONAS	O INS CLINIC	Property	Value	29-Aug-2010 21 USE.	
BARNABY JONAS _	-	TOP	0	29Aug-2010 22. USE.	anananana a
C FLINT ROBERT L		LEFT	0	. 29Aug-2010 22. USE.	(Jalo Only
ELLERBY,SUSAN		HEIGHT	52	29-Aug-2010 21 USE	
CHARLES, MICHAE				. 13:Sep-2010 16 USE.	-
TAYLOR, CHRISTIN	and the second	WIDTH	75	28Jan-2011 12:36 USE.	
	ICU-1	ALIGN	None	24-Aug-2010 06 USE.	
PATIENT TWO A.D		ANCHORS	Top:Left	03-Aug-2010 07 USE.	
	ICU-3 DICAL			. 24Aug-2010 13 USE. 24Nov-2010 11 USE.	
JOHNSON ESTHE	/ILAL	SiteUil	http://nhinint01.asu.edu.8080/UniversalClientG	03/Dec-2010 09 USE.	
JOHNSON ESTHE		CAPTION	KMR	07-Dec-2010 00 USE.	
JOHNSON ESTHE		BACKGROUNDCOLOR			
JOHNSON ESTHE	-	BACKGHUUNDCULUH		07.Dec-2010.02 USE	
JOHNSON ESTHE				07-Dec-2010 02 USE	and the second
STONE, JOHNATH				29-Aug-2010 21 USE.	Process
TALBOT MARY (9 ICU				14-Sep-2010 09 USE.	- (b) Al
TALBOT, MARY (9. ICU	<u></u>			14-Sep-2010.09 USE.	-
	40 IHS CLINIC	-		13/Sep-2010 14 USE.	W Desta
	IN THE CLINIC			13/Sep-2010 16: USE.	D. And the second se
	40 IHS CLINIC			13-Sep-2010 16 USE.	100 miles of
the second state of the se	40 IHS CLINIC	OK	Cancel Apply	. 13-Sep-2010 21 USE. 14-Sep-2010 10 USE.	and the second second second second
TOLIVERANN (9 DEN BARINABY JONAS	ou ins cuinic		Abnormal labs - IHC		
FUNT ROBERT			Imaging Result: O		
FUNT, ROBERT L.			Imaging Result: O		
SIMPSON BARBAR				R. 28-Sep-2010 11. USE.	Show All

Figure 3-2: KMR Viewer Launch Button Properties

Installation/Configuration Guide CCD/C32 Component November 2011 The SiteUrl property is used to define the location of the KMR NHIN Inbox Web service location. If you are using this service, consult your KMR resource for the appropriated URL.

3.3 General Properties for Launch Buttons

The launch button components support the following general properties.

ALIGN	Enum RW	Sets the alignment of the component relative to its parent. One of:
		0 = None – no alignment occurs
		1 = Top – aligns to the top boundary of the parent
		2 = Bottom – aligns to the bottom boundary of the parent
ANCHORS	Integer	The anchoring of control boundaries relative to its parent. An anchored boundary maintains a constant distance from the parent boundary, even if the parent resizes. May be the additive combination of the following values:
		1 = top
		2 = left
		4 = right
		8 = bottom
ТОР	Integer	The position of the topmost portion of the control in the Coordinate system of its parent.
LEFT	Integer	The position of the leftmost portion of the control in the coordinate system of its parent.
HEIGHT	Integer	The height of the control in pixels.
WIDTH	Integer	The width of the control in pixels.
CAPTION	Text	Display label for the button
BACKGROUNCOLOR	Color	Background color to display

3.4 C32 Viewer Listening Service

The only configuration item for this component is to include the C32 Viewer Listening Service from Design Mode as:

Patient not selected Visit not selected USER.SUPER Prinary Care Team Unaccigned				Pham 🐮	a 9.	Na			KMR	
otik	ations for All Patients									
ubjet ende horiky ype			Adverse	equired Services Reaction Data Entry		Order require Order require Critical lab: Fi	s electron.	10.Sep-2010 15 23.Sep-2010 13 13.Sep-2010 15 29.Aug-2010 21 29.Aug-2010 22 29.Aug-2010 22	USE USE USE USE USE USE	Logend Phioty Low Medium High () Into Only
				ver Listening Service vice				29Aug-2010 21 13Sep-2010 16	USE	
TAVLOR, CHRISTIN. DEMO FATHER (ICU ICU-1 PATIENT TWO A.D. PATIENT SX:A,C.P. ICU ICU-3 TEST, ENILY ROSE. MEDICAL JOHNSON, ESTHE. JOHNSON, ESTHE. JOHN		MDAO C Patient C Paint Ser Remote Ste Con Scrut Ov	plions Jaic er Context Object iomponent Iontext Object	<u> </u>	Cano	*	28 Jan 2011 12 36 24 Aug 2010 06 03 Aug 2010 07 24 Aug 2010 07 24 Aug 2010 07 04 Dec 2010 09 07 Dec 2010 00 07 Dec 2010 02 07 Dec 2010 02 29 Aug 2010 21 14 Sep 2010 09 13 Sep 2010 16 13 Sep 2010 16	USE USE USE USE USE USE USE USE USE USE	Process Al Selected	
	TOLIVERIANN (S TOLIVERIANN (S BARNABY JONAS	DEMO IHS CUI DEMO IHS CUI	and the second sec			Imaging Res Abnomal lab		13/Sep-2010 21 14/Sep-2010 10 29/Aup-2010 22	USE USE	Forward
	FUNT ROBERT L.					Imaging Res Imaging Res	AL CHE	09-Sep-2010 10	USE USE	× Deleta
-	SIMPSON,BARBAR					New consult Completed C		29.Sep-2010 11: 29.Sep-2010 11:	USE	Show Al

Figure 3-3: Including C32 Listener Service

This is accessed via the Design Menu as Design/Required Services.

4.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS):

Phone: (505) 248-4371 or (888) 830-7280

Fax: (505) 248-4363

Web: http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm

Email: <u>support@ihs.gov</u>