

Changepoint 2017

Product Architecture and Technology Matrix

Version 1.4

Revision History

Revision	Comments	Date
1.0	CP2017 GA Release Label 18.00.118.000	April 7, 2017
1.1	Updated the SAI Notes 3. The update for Service Bus Server 1.1 (KB3086798) needs to be applied, or Service Bus might fail to start	April 13, 2017
1.2	Updated the SAI Note 4 with the following for the requirement on Great Plains server: Microsoft SQL Server Native Client 2012 SP1	April 21, 2017
1.3	Added certification for Exchange Online integration (Office 365) through the general patch release of 18.00.122.000	June 15, 2017
1.4	Introduce the certification for Mobile Apps 2.0.0 which introduces the support for Expense Management for Smartphones and Tablets Updated CC Notes 16 Mobile Apps 2.0.0 has dependency on enterprise general patch 18.00.129.000	November 24, 2017

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Purpose

This Product Architecture and Technology Matrix provides technology platform and prerequisite software requirements for Changepoint 2017. Be sure to obtain the most up-to-date version of this document before you finalize your configuration. In conjunction with the Product Architecture and Technology Matrix please consult the Third Party Software Support Policy.

Any links given within this document are valid at the time the document is originally posted, but may become outdated over time.

Reading the tables

All references to Microsoft Windows Server Operating System and Microsoft SQL Server are for Standard and Enterprise editions, unless specified otherwise.

Requirements are shown in lists as follows:

- Windows Server 2012, R2
- SQL Server 2014, SP1, SP2

Which means that any of the following versions of Windows O/S/SQL Server can be used:

- Windows Server 2012
- Windows Server 2012 R2
- SQL Server 2014 without any service pack
- SQL Server 2014 SP1
- SQL Server 2014 SP2

Note: More recent versions of software that have been certified with this release are indicated with blue highlighting. The highlighting indicates changes since the version of Changepoint 2014 SP2.

Server Components (SC)

All references to Changepoint documents are to the most recent versions available on the product media, or in the Team Folder in Changepoint, or through your Client Manager or Project Manager.

Database Serve	•	
Operating System	Windows Server 2012, R2Windows Server 2016	SC Note 1
Database Version	 SQL Server 2014, SP1, SP2 SQL Server 2016 CU4 and above, SP1(CU1 and above) 	SC Note 3
.NET Framework Version	.NET Framework 4.6.2	SC Note 4

Database Server		
Additional Software	 MS Office 2010 System Converter Microsoft Filter Pack 	SC Note 6
Server Language Support	EnglishFrenchGermanSpanishDutch	SC Note 5
Web Server		
Operating System	Windows Server 2012, R2Windows Server 2016	SC Note 1
Additional Mandatory Software	 Microsoft SQL Server Native Client 2012 SP1 	
IIS Version	 Microsoft IIS 8 Microsoft IIS 8.5 Microsoft IIS 10 	
.NET Framework Version	.NET Framework 4.6.2	SC Note 4
Additional Software	 Microsoft Office Web Component Version 11.0 (owc11.exe) 	SC Note 2

Spanish

Dutch

English

French

German

Server

Language Support SC Note 5

Web Server (IIS) Roles and Features

Windows Server 2012, R2 Roles

Common HTTP Features

- Static Content
- Default Document
- Directory Browsing
- HTTP Errors
- HTTP Redirection

Health & Diagnostics

- HTTP Logging
- Logging Tools
- Request Monitor
- Tracing

Security

• All Options

Application Development

- ASP.NET 4.5
- NET Extensibility 4.5
- NET Framework 3.5
 Features
- WebSocket Protocol
- ASP
- ISAPI Extensions
- ISAPI Filters
- Application Initialization

Management Tools

- IIS Management Console
- IIS Management Scripts & Tools

Performance

• All Options

Windows Server 2012, R2 Features

NET Framework 4.5 Features

- .NET Framework 4.5
- ASP.NET 4.5
- WCF Services
 - o HTTP Activation
 - TCP Port Sharing
- Windows Process Activation Service
- Process Model
- .NET Environment Configuration APIs

Windows Identity Foundation 3.5

Windows Server 2012, R2 Features

Web Server (IIS) Roles and Features

Windows Server 2016 Roles

Common HTTP Features

- Static Content
- Default Document
- Directory Browsing
- HTTP Errors
- HTTP Redirection

Health & Diagnostics

- HTTP Logging
- Logging Tools
- Request Monitor
- Tracing

Security

All Options

Application Development

- NET Extensibility 3.5
- WebSocket Protocol
- ASP
- ASP.NET 4.6
- NET Extensibility 4.6
- ASP
- ISAPI Extensions
- ISAPI Filters
- Application Initialization

Management Tools

- IIS Management Console
- IIS Management Scripts & Tools

Performance

All Options

Windows Server 2016 Features

NET Framework 4.5 Features

- .NET Framework 3.5
- .NET Framework 4.6
- ASP.NET 4.6
- WCF Services
 - HTTP Activation
 - TCP Port Sharing
- Windows Process Activation Service
- Process Model
- .NET Environment Configuration APIs

Windows Identity Foundation 3.5

Redis

- Redis 3.0.504
- Windows Server 2012, R2
- Windows Server 2016
- Microsoft SQL Server Native Client 2012 SP1
- .Net Framework 4.6.2

For details, see the *Installing and Configuring Redis* chapter in the *Installation Guide* document available in Team Folders in Changepoint, or through your Client Manager or Project Manager.

SC Note

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IBM Cognos Business Intelligence		
Cognos App Tier	 IBM Cognos Business Intelligence 10.2.2 Fix Pack 7 Microsoft SQL Server Native Client Windows Server 2012, R2 Windows Server 2016 	SC Note 8
Content Store	 SQL Server 2014, SP1, SP2 SQL Server 2016 CU4 and above, SP1(CU1 and above) 	SC Note 8

For details, see the *Cognos BI Installation and Configuration* chapter in the *Installation Guide* and the *Changepoint Hardware Recommendations Release* document available in Team Folders in Changepoint, or through your Client Manager or Project Manager.

Intelligent Forms		
Infiniti	• Intelledox Infiniti 9.6.19.0	
Web Server	 Windows Server 2012, R2 Windows Server 2016 Microsoft SQL Server Native Client 2012 SP1 	
Database Server	SQL Server 2014, SP1, SP2,SQL Server 2016	
Web Service	 Changepoint Web Services WCF API 	

For details, see the *Configuring Intelligent Forms* chapter in the *Installation Guide available* in Team Folders in Changepoint, or through your Client Manager or Project Manager.

Changepoint Windows Services (WS)

The Changepoint Windows services can be installed on any Changepoint server or any server with access to the Changepoint database. If you install Changepoint Windows services on a non-Changepoint server ensure that the server meets the requirements of the Web Server or Database server for:

- Operating System
- .NET Framework Version
- Microsoft Internet Explorer 11 for CP Report Prerender Service

For further details regarding a specific Changepoint Windows Service refer to the *Changepoint Installation Guide* available in Team Folders in Changepoint or through your Client Manager or Project Manager.

Changepoint Windows Services		
CP Email Notification Service	64 bit O/S support	
CP Exchange	64 bit O/S support	
Synchronization Service	Exchange Web Services	
CP Mail Service	64 bit O/S support	
CP Report	64 bit O/S support	
Prerender Service	 Microsoft Internet Explorer 11 (minimum) 	
CP Report Scheduler Service	64 bit O/S support	

Changepoint Integration Framework Services

The Integration Framework requires the Changepoint Web Services API. The Changepoint Integration Framework services can be installed on any Changepoint server or any server that can communicate with the Microsoft Service Bus. For further details, refer to the *Changepoint Integration Framework Reference* document available in a Team Folder in Changepoint, or through your Client Manager or Project Manager.

Changepoint In	tegration Framework Service
CP Export Publishing Service	64 bit OS support
CP DataMapper Service	 64 bit OS support Can be installed on any machine that can communicate with Microsoft Service Bus, CP Export Publishing and CP Communication Dispatcher service
CP Communication Dispatcher Service	 64 bit OS support Can be installed on any machine that can communicate with Microsoft Service Bus
American Expre	ess Corporate Credit Card Integration
American Express Corporate Credit Card Integration	Support for AMEX (American Express) GL1025 standard, version 4.4 file format

Server Additions and Integrations (SAI)

Server additions can only be installed on the following platforms.

Platform		
Operating System	Windows Server 2012, R2Windows Server 2016	SC Note 1
.NET Framework Version	• .NET Framework 4.6.2	SC Note 4
Additional Software	• N/A	
Server Language Support	 English French German Spanish Dutch 	SC Note 5

Server Addition	ons and Integrations	
API: Web Services API/WCF API	 .NET Framework 4.6.2 (server) Microsoft IIS Language software on the servers must be consistent. If using Web Services API: Microsoft Web Services Enhancements: WSE 2.0 SP3 must be installed on the client and server. If using WCF API, WSE 2.0 SP3 is not required. For details, see the Changepoint API Reference and the Changepoint API Installation Guide 	SAI Note 1 SAI Note 2 SAI Note 5
API: Web Services API Regional Setting Support	 English: United States (supported Regional Settings option). For deployment of the Changepoint API on non-English servers refer to the Changepoint API Installation guide for configuration instructions for modifying the English: United States regional setting. 	
Changepoint Integration Framework	 Microsoft Service Bus 1.1 (with KB3086798) Changepoint SFDC Adapter For details, refer to the Changepoint Integration Framework Services section in this matrix as well as the Changepoint Integration Framework Reference 	SAI Note 3
Microsoft Dynamics GP Toolkit	Microsoft Dynamics GP 2015R2 For details, see the Microsoft Dynamics GP Toolkit Administration Guide	SAI Note 4

Server Addition	ons and Integrations	
Microsoft Exchange	 Exchange Server 2013 SP1 (English Only) Exchange Server 2016 (English Only) Exchange Online (Office 365) For details, refer to the general patch 18.00.122.00 release notes and the Changepoint Installation Guide 	
Single Sign- On	 ADFS 2.0, 2.1, 3.0 – (RP-STS_ADFS endpoint) SAML 2.0 – ADFS 2.0 (RP-STS_SAML endpoint) SAML 2.0 – PingFederate version 7.2 (RP-STS_SAML endpoint) ISAPI (RP-STS_ISAPI endpoint) Windows Azure Active Directory Windows Powershell 2.0 for running configuration scripts to aid with the setup For details, see the <i>Installing and Configuring Single Sign-on</i> chapter in the <i>Changepoint Installation Guide</i>. 	SAI Note 5
Transport Tool	 Changepoint 2017 Transport Tool (English Only) For details, see the Changepoint Transport Tool User Guide 	
URLScan	 URLScan 3.1 For details, see the Changepoint Installation Guide 	SAI Note 6
Microsoft Service Bus	 Microsoft Service Bus 1.1 For details, see the Changepoint Integration Framework Reference 	

Client Components (CC)

Client Platform - Changepoint

Microsoft Windows		
Operating System	 Windows 7 SP1 (32 or 64-bit) Windows 8.1 Update (KB2919355). (Desktop Mode only) (32 or 64-bit) Windows 10 (32 or 64 bit) 	CC Note 7
Web Browser	 Internet Explorer 11 (32-bit browser only) Firefox ESR 45, ESR 52 Chrome 57 	CC Note 4 CC Note 8 CC Note 9
.NET Framework Version	.NET Framework 4.6.2	CC Note 1
Additional Software	 Microsoft Silverlight 5.1.20513 plug-in (32 or 64 bit) 	CC Note 5
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3

Apple Mac		
Operating System	• MAC OS X 10.12	
Web Browser	 Firefox ESR 45, ESR 52 Safari 10 	
Additional Software	Microsoft Silverlight 5.1.20913 plug-in	CC Note 5
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3

Client Portal			
Operating System	Refer to Client Platform – Changepoint section above		
Web Browser	 Internet Explorer 11 (32-bit browser only) Firefox ESR 45, ESR 52 Chrome 57 Safari 10 (on a MAC O/S) 	CC Note 4 CC Note 7	
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3	

Report Designer - Microsoft Windows O/S and IE only			
Operating System	 Windows 7 SP1 (32 or 64-bit) Windows 8.1 Update (KB2919355). (Desktop Mode only) (32 or 64-bit) Windows 10 (32 or 64 bit) 	Windows 8.1 Update (KB2919355). (Desktop Mode only) (32 or 64-bit)	
Web Browser	 Internet Explorer 11 (32-bit browser only) 	CC Note 9	
.NET Framework Version	.NET Framework 4.6.2		
Additional Software	• N/A		
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3	

Mobile Apps for Smartphones and Tablets			
Operating System	iOS 9 or higher Android 4.4 or higher	CC Note 16	
Web Browser	Native browser for device		
Screen Size	Minimum: Width: 640, Height: 960Maximum: Width: 1440, Height: 2560		
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3	

Mobile Web for Smartphones			
Operating System	 BlackBerry 10 OS 10.3 or higher Apple iOS 9.3 or higher Android 6.0 or higher CC Note 14		
Web Browser	Native browser for device		
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3	
Tablet Support			
Operating System/Web Browser	 iOS 9.3 or higher: Safari native browser Windows 8.1, Windows 10: Internet Explorer 11 Desktop Mode Android 5.1.1 or higher: Chrome 57 	CC Note 10 CC Note 11 CC Note 13 CC Note 15 CI Note 6	
Client Language Support	 English French German Brazilian- Portuguese Italian Italian 	CC Note 2 CC Note 3	

Cognos Client O/S and Browser Support Windows 7 SP1 (32 or 64-bit) CC Note Operating <u>12</u> Windows 8.1 Update (KB2919355). (Desktop System Mode only) (32 or 64-bit) Windows 10 (32 or 64 bit) Refer to Cognos BI 10.2.2 Fix Pack 7 Software Environments link for details on supported O/S. Web browsers for Cognos report authoring and report Web rendering **Browser** Internet Explorer 11 Firefox ESR 45, ESR 52 Chrome 57 **Intelligent Forms Client O/S and Browser Support** Windows 7 SP1 (32 or 64-bit) Operating Windows 8.1 Update (KB2919355). (Desktop System Mode only) (32 or 64-bit) Windows 10 (32 or 64 bit) Internet Explorer 11 Web Firefox ESR 45, ESR 52 **Browser** Chrome 57 Microsoft Office 2013 SP1 Microsoft Microsoft Office 2016 Office

Client Integrations (CI)

The requirements listed below are **in addition** to the **Client Platform Requirements** listed in the Client Components section. There is no support for the MSP Integration, Outlook Tools, Excel Expenses Add-in, Cognos Sync Utility on the MAC client, mobile devices or tablet. There is no support for the Personal Credit Card Integration on the MAC client or mobile devices.

Client Integrat	ions		
Microsoft Project (MSP) Integration	All references to MSP certification below are for Standard and Professional editions • MSP 2013, SP1 (32 or 64 bit) with KB2882986 and KB 2899569 installed. • MSP 2016 (32 or 64 bit) For details of installation, refer to the Changepoint Project Management user Guide.		
Outlook Tools	 Microsoft Outlook 2013 SP1 (32 or 64 bit) Microsoft Outlook 2016 (32 or 64 bit) Microsoft Office 365 (32 or 64 bit) .NET Framework 4.6.2 For details of installation, refer to the <i>Changepoint User Basics User Guide</i>. 	CI Note 2 CC Note 1	
Outlook Tools Regional Setting Support	• English	CI Note 3	
Changepoint Excel Expenses Add-in	 .NET Framework 4.6.2 Microsoft Office 2013 SP1 Microsoft Office 2016 Microsoft Visual Studio 2010 Tools for Office Runtime Microsoft Visual C++ 2010 Redistributable 32-bit and 64-bit Changepoint WCF API 	CI Note 4 CC Note 1	
Changepoint -Cognos Sync Utility	 .NET Framework 4.6.2 Microsoft SQL Server Native Client 2012 SP1 Utility content is English only 	CI Note 5	
Personal Credit Card Integration	 Support for Compliance with OFX (Open Financial Exchange) 1.0.x standard IE 11 only (32-bit content processing) Firefox ESR 45; ESR 52 Chrome 49 Safari 10 (on a MAC O/S) 	CI Note 6	

Server Component (SC) Notes

Introduction

- SQL Server Collation Settings: The SQL Server must be installed with SQL_Latin1_General_CP1_CI_AS as the collation setting.
- Software running on the servers must use a consistent language; for example, the German configuration consists of the German Windows OS, German IIS and German SQL Exception: Dutch certification consist of the Dutch Windows OS Dutch IIS and English SQL (because the Dutch SQL software is not available at

time of certification).

- Archiving Solution consists of certification on the same language database servers. The SQL Server version and database collation must match between the production server/database and archive server/database, otherwise data corruption or errors might occur.
- Certification of Changepoint 2017 was completed with a cross section of third party hardware and software solutions which included but were not limited to VMWare vSphere 5.1.
- Changepoint Report Designer website continues to require the emulate Internet Explorer 7 mode in the web.config file. This mode is set by the Changepoint installer.
- SC Note 1: Native 64-bit is **not** supported on the Changepoint Web server, a flag is set to utilize a feature called Windows on Windows 64-bit (WOW64) (which will set the server compatibility mode to that of 32 bit) during the Changepoint website installation.
- SC Note 2: Microsoft Office Web components must be installed on the Web Server in order to view the graphic dashboard components. For release 2017, Microsoft Office Web components version 11 (owc11.exe) continues to be supported on the web server platform.

Specific Changepoint functionality (Changepoint portal charts, Survey Management, Portfolio Management trend charts and IPM trend charts) that utilizes owc11.exe have been tested and verified to work on Windows 2012, R2/2016 systems. This does not imply that owc11.exe is certified on Windows 2012, R2/2016 systems, only that Changepoint functionality functions correctly.

For more information, refer to the Changepoint 2014 Installation Guide.

OWC 11.0 can be downloaded from:

http://www.microsoft.com/downloads/details.aspx?FamilyID=7287252c-402e-4f72-97a5-e0fd290d4b76&DisplayLang=en

SC Note 3: For more information about the database server requirements, refer to the Microsoft links below:

For SQL Server 2014 and SQL Server 2016

Refer to Microsoft's website at: www.microsoft.com

SC Note 4: The .NET Framework is a platform requirement for the Changepoint web server and database server.

For Microsoft .NET Framework 4.6.2 refer to:

https://www.microsoft.com/en-us/download/details.aspx?id=53345

In order to support Export to Excel capabilities in budgeting, Open XML SDK 2.5 for Microsoft Office was utilized. This component will be installed on the web server by the Changepoint installer. Link below is for informational purposes. http://www.microsoft.com/en-us/download/details.aspx?id=30425

SC Note 5: Dutch database support consists of the following certified configuration:

Dutch Microsoft Windows operating system, as defined in the Operating System column in Server Components table.

English SQL Server installation (collation set to

SQL_Latin1_General_CP1_CI_AS) as there are no Dutch SQL installation versions available for download/install at time of certification.

SC Note 6: You can download and register iFilters with the Microsoft Windows Indexing Service. iFilters are used by Microsoft Search products to index the contents of specific document formats including PDFs.

To enable knowledge search and support search for Microsoft Office 2013/2016 file formats (docx, .docm, .pptx, .pptm, .xlsx, .xlsm, .xlsb, .zip, .one, .vdx, .vsd, .vsd, .vst, .vdx, .vsx, and .vtx), the 2010 Office System Converter: Microsoft Filter Pack" is required on the database server. To enable iFilter for .pdf, refer to the Adobe iFilter page on the Adobe website for download information.

Refer to:

http://www.microsoft.com/en-us/download/details.aspx?id=17062

SC Note 7: For information on Redis for Windows Server refer to:

https://raw.githubusercontent.com/MSOpenTech/redis/3.0/Redis%20on%20Windows%20Release%20Notes.md

Redis is a mandatory requirement for Changepoint Enterprise websites, and must be installed and configured for the web server.

Redis certification was performed on environments consistent with the Changepoint webserver O/S and .NET requirements. Specifically Redis was certified on the following configurations:

- (1) Windows Server 2012, R2
- (2) Windows Server 2016
- (3) .NET Framework 4.6.2

SC Note 8: The Cognos App Tier and Cognos Gateway installers have a dependency on .NET Framework 4.0 (minimum) in order for the installer to launch.

Refer to Cognos BI 10.2.2 Fix Pack 7 Software Product Compatibility Reports link for details on supported server O/S and editions as well as refer to CC Note 12 for client-side restrictions.

From the link below, set the Available Reports field to 10.2.2.7 maintenance level and navigate to the Supported Software tab.

http://www-969.ibm.com/software/reports/compatibility/clarity-reports/report/html/preregsForProduct?deliverableId=1391013543612

If your organization is planning to deploy Cognos BI, IBM's Cognos Gateway is installed on the Changepoint web server as part of the installation.

Microsoft SQL Server Native Client is installed on the Cognos App Tier via the installer. This native client version must be consistent with the Microsoft SQL Server version of your Changepoint/Content Store database server.

The Content Store database is installed on the same server as the Changepoint database.

Cognos – The Content Store service is installed (and managed) on the Cognos App Tier.

SC Note 9: If your organization is planning to deploy the Corporate AMEX Credit Card Feed, refer to the *Changepoint Integration Framework Reference* guide.

Server Additions and Integrations (SAI) Notes

Introduction

- The requirements listed below are in addition to the Server Platform (database server/web server) requirements indicated in the Server Component table. For more information, refer to the specific installation/user guide documentation provided in the Team Folder in Changepoint or through your Client Manager or Project Manager.
- Changepoint API: Language software on the servers must be consistent.

For example, the French configuration consists of:

- French Microsoft Windows Server
- French Microsoft IIS
- French Microsoft SQL Server
- French Changepoint installation (French database)
- French Changepoint API installation

Exception: Dutch certification consists of:

- Dutch Microsoft Windows Server
- Dutch Microsoft IIS
- English Microsoft SOL Server
- Dutch Changepoint installation
- Dutch Changepoint API installation
- **SAI Note 1:** Changepoint Web Services API is certified on both WCF (Windows Communication Foundation) and Microsoft Web Services Enhancements 2.0 SP3. Customers wishing to use Web Services API with WSE 2.0 SP3 will need to install WSE 2.0 SP3 on both client and server.

The Changepoint Web Services API is certified on a configuration where the Changepoint Web Services API is installed on the same web server as the Changepoint application.

SAI Note 2: The Web Services API continues to be supported on a 32-bit configuration. The Changepoint API installation will set the server compatibility to 32-bit mode (WOW64). Since the compatibility is changed to that of 32-bit, there are no issues with running COM and Web Services API on a 64-bit O/S.

Specific Changepoint API security functionality utilizing the WSE 2.0 SP3 extension have been tested and verified to work on Windows 2012, R2/2016 systems. This does not imply that WSE 2.0 SP3 is certified on Windows 2012, R2/2016 systems, only that Changepoint API functionality functions correctly.

SAI Note 3: For the SalesForce Integration Toolkit, refer to the *Changepoint Integration*Framework Reference available in Team Folders or from your Client Manager or Project Manager for additional details.

The following hot fix needs to be applied, or the Windows Service Bus 1.1 might not start.

SAI Note 4: SQL_Latin1_General_CP1_CI_AS

For details, see the Microsoft Dynamics GP Toolkit Administration Guide.

Microsft SQL Server Native Client 2012 SP1 is a requirement on Great Plains server.

SAI Note 5: Windows Powershell 2.0 is required for running configuration scripts to aid with the setup.

Download and install the x64 runtime package applicable to your operating system from the following Microsoft URL or install using the Microsoft Platform Installer.

http://www.iis.net/download/PowerShell

Refer to Changepoint Installation Guide for details.

The Changepoint WCF API is supported for the ISAPI and ADFS endpoints for SSO implementations only. If you have deployed a SAML endpoint for the Changepoint application, then the Changepoint API website must be configured to use application authentication.

SAI Note 6: Microsoft URLScan Filter 3.1 is certified in Changepoint 2017 for supported IIS versions. Refer to:

http://www.microsoft.com/downloads/details.aspx?FamilyId=EE41818F-3363-4E24-9940-321603531989&displaylang=en&displaylang=en

IIS 8 and higher, integrates support and troubleshooting features including URLScan 3.1 (now known as the Request Filter Module). Refer to:

https://technet.microsoft.com/en-us/library/hh831621(v=ws.11).aspx

Changepoint system administrators may need to modify the URLScan parameters. Refer to the *Changepoint Installation Guide* for further detail.

Client Component (CC) Notes

Introduction (applicable to all clients/devices)

- As of Changepoint 2017, the majority of Changepoint Administration functionality is now supported on multiple browsers. Browser support consists of Internet Explorer, Firefox, Chrome and Safari (on a MAC O/S). This is in addition to Internet Explorer support. Features which still only support Internet Explorer are listed in CC Note 4. Users can review their assigned features in Changepoint by navigating to their **Preferences -> Application Features** section.
- Due to the rapid pace at which web browsers are released to market, it is Changepoint's intent to apply reasonable effort to remain current with the web browsers as they become available.
- Software running on the Client must be consistent; for example, the German Client configuration consists of German Windows Win 7 SP1 O/S and German Outlook 2013 software.

- Export to Excel is supported only when the browser language matches the regional settings on the client workstation.
- Changepoint Add-in installers: The Add-in installations are only certified when the client-side operating system language matches the installer language selection.
- The East Asian Language pack is required on the client to display Unicode characters in the User Interface correctly.
- Languages preference is set in the web browser. Language Preference dictates the
 formatting of number, currency, time and date values and their display on the
 Changepoint user interface.

Microsoft Windows Introduction

- Microsoft Office Web components version 11.0 must be installed on client
 workstations accessing the Pivot Table in Survey Management. Additionally the
 client workstation must have 'Local Intranet" access to the Changepoint website.
 If the security access to the Changepoint website is either "Internet" or "Trusted
 Sites" the Pivot Table will not work.
- The existing 32 bit Changepoint Add-in for Report Designer Print Utility continues to be supported in Internet Explorer (only). The Report Designer Print Utility is required in order to print reports designed with custom headers and footers. If this utility is not installed, reports will print with default headers and footers.
- Report Designer Scheduled Reports sent via e-mail are certified to render in the web browsers noted in the **Client Components** (**CC**) section of this matrix.
- Changepoint supports Internet Explorer natively. The Compatibility View setting
 must be disabled in Internet Explorer otherwise customers will not be able to sign
 in to Changepoint if this setting is preserved or selected. To disable the setting,
 navigate to Internet Explorer –Tools Compatibility View Settings and deselect Display intranet sites in Compatibility View.
- Microsoft Internet Explorer users accessing Changepoint should ensure that the "Enable DOM storage" advanced option is enabled (default). If this option is disabled or unchecked, users will encounter home page formatting issues and/or "get a 'localstorage' is null or not an object error."
- CC Note 1: The Microsoft .NET Framework is required for the following Changepoint add-ins: Changepoint MSP, Changepoint Outlook Tools, Report Designer Print Utility and Excel Expenses Template. The Changepoint add-in installers will not install .NET Framework on the client machines.
- **CC Note 2:** Client language support consists of the following seven language translations. The Changepoint user interface labels display the translation (for one of the specified languages below) on the client.

English language preference: United States, United Kingdom, Australia, Canada, New Zealand, Ireland, South Africa, Jamaica, Caribbean, Belize, Trinidad

French language preference: France, Belgium, Canada, Switzerland, Luxembourg

German language preference: German, Switzerland, Austrian, Luxembourg, Liechtenstein

Spanish language preference: Spain, Argentina, Bolivia, Chile, Columbia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Puerto Rico, Paraguay, El Salvador, Uruguay, Venezuela, Traditional sort [es-ES_tradnl], International sort [es-ES]

Italian language preference: Italy, Switzerland
Portuguese language preference: Brazil, Portugal
Dutch language preference: Netherlands, Belgium

CC Note 3: For the following languages, the formatting of number, currency, time and date values will conform to the language selected in your browser. However, the user interface labels will be displayed in English.

Chinese language preference: PRC, Taiwan, Singapore, Hong Kong, Macau

Norwegian language preference: Nynorsk, Bokmal

Danish language preference: Denmark Finnish language preference: Finland

Swedish language preference: Sweden, Finland

Japanese language preference: Japanese

Korean language preference: Korea

CC Note 4: All the standard .asp reports are only available in Internet Explorer.

Below is a listing of Changepoint features that are only supported in Internet Explorer.

Category	Feature Code	Feature Description
Administration	ORS RPD	Override report security settings Report Designer
	ACS	Access Condidate Sercening
	ARS	Access Candidate Screening Access Request Screening
	RMA	Approve Resource Demand Scenarios
Candidate	RMC	Create Resource Demand Scenarios
Screening	RMD	Delete Resource Demand Scenarios
	RMM	Edit Resource Demand Scenarios
	RMV	View Resource Demand Scenarios
•	ARR	Adjust Revenue Recognition
Initiative	FRR	Process Final Revenue Recognition
management	TRR	Process Tentative Revenue Recognition
g	URR	Update Revenue Recognition Settings
	VRR	View Revenue Recognition Reports
Import/Export Management	ID	Import Data
	ED	Export Data

Category	Feature Code	Feature Description
	ICM	Create Metrics
	IDM	Delete Metrics
	IEM	Edit Metrics
Individual	ISM	Performance Management Administrator
Performance	IVD	View My Workgroup Metric Results (Drill-Down)
Management	IVM	View Metrics
	IVP	View Personal Metrics Results
	IVR	View Metric Results of Any Resource
	IVW	View Workgroup-Level Rollup of Metric Results
	CA	Create Assets
Operations	DA	Delete Assets
Center	MA	Edit Assets
Management		
	N28	Financial Reminders
Portals	N29	My Performance Chart
Tortais	N30	People Performance Management
	N31	Surveys
	ARF	Report Designer Advanced Features
Report Features	RPD	Report Designer (Access the Report Designer application)
rioport i dataroo		Report Scheduling
	RPS	
_	VRI	View Survey Rating Information
Resource	VSO	View Surveys of Others
Information		
	SVA	Survey Management Administrator
	SVC	Create Surveys
Survey	SVR	View Surveys
Management	SVT	Create Survey Templates
	OVI	Oreate ourvey remplates
		I.

CC Note 5: Microsoft Silverlight plug-in is required for launching Project Worksheet, Scenario Comparisons and Resource Management Worksheet on clients running Windows operating systems as well as the Apple Mac.

Microsoft Silverlight plug-in is no longer supported in Chrome browser starting from version 45. As result, the Project Worksheet, Scenario Comparisons and Resource Management Worksheet will not render. Workaround is to use IE or Firefox browsers instead.

See details:

https://support.microsoft.com/en-us/kb/3058254

CC Note 6: Blackberry mobile certification consisted of Blackberry Z10 (10.2.1.2102) device using BlackBerry Browser.

Anonymous access is recommended for Blackberry mobile devices.

CC Note 7: Windows 7 SP1, Windows 8 and Windows 10 **64 bit** processor certification includes **64 bit** support for the Changepoint add-ins and Microsoft Office products.

For Microsoft Office products, both 32 bit and 64 bit versions have been certified on Changepoint release CP2017, such as Changepoint MSP, Changepoint Outlook Tools

(as per versions indicated), Changepoint Excel Expenses and Microsoft Silverlight plug-in. Ensure to check your Add-in to confirm **64 bit** support.

For details, see *Changepoint Installation Guide* (for information on how to configure the add-ins); and "Changepoint Outlook tools" chapters of the *Changepoint User Basics User Guide* (for add-in installation information).

- CC Note 8: Users encountering issues when adding parameters to an email template can add the Changepoint website to their trusted sites in the web browser.
- **CC Note 9:** With Windows 8.1 Update IE 11 is certified only in Desktop mode (32-bit and 64-bit OS) with a 32-bit browser. Please note that:
 - 1) In Advanced Internet Options, 'Enable Enhanced Protected Mode' must be Off.
 - 2) On Trusted sites zone, 'Enable Protected Mode' must be Off.
 - 3) On Trusted sites zone, if 'Enable Protected Mode' is On, Changepoint Must be added as a trusted site.
 - 4) On Trusted sites zone, if 'Enable Protected Mode' is Off, Changepoint Must Not be added as a trusted site.

On Windows running IE 11, Microsoft Security Bulletin MS14-010 should be applied on your client workstation otherwise you will not be able to create resource requests from a project team in IE 11. For more information refer to: https://technet.microsoft.com/en-us/security/bulletin/ms14-010

CC Note 10: On tablets, Changepoint help, Changepoint Administration help and eLearning (if purchased) are accessible to all users. With the exception of the help files and eLearning, the tablet functionality is restricted to the Changepoint feature set listed below. Because only specific tablet functionality is certified for tablet devices, Changepoint will not support or address any issues that might be encountered in other functional areas.

The Microsoft Windows tablets will render full Changepoint functionality; it is not restricted by the feature set listed below.

Applications Management	VPR	View Products
Approval Workflow	TA EA	Time Approval Expense Approval
Availability Planning	PR RS VPC	Planned Resources Search Resources View Personal Calendar Entries
Campaign Management	VCP	View Campaigns

Candidate Management	MAO MDO VO	Manage All Opportunities Manage Workgroup Opportunities View Opportunities
Competition Management	CV	View Competitors
	AT	Create Time Adjustments
	CT	Copy Time
	MTK	Manage Tasks (Project Planning Workshee only)
	TTN	Track Non-Project-Related Time
	TTP	Track Project-Related Time
Desktop Features	TTR	Track Request Time
Desktop reatures	VTS	View Time Sheets
	VRP	View Reports
	VCC	View Companies
	VPJ	View Projects
	VTF	View Team Folders
	TEX	Track Expenses
	VEX	View Expenses
Engagement Management	VE	View Engagements
	VKM	View Knowledge Items
Knowledge Management	VSI	View Support Items
perations Center lanagement	VRQ	View Requests
	N01	My Reminders
	N02	My Activities
	N03	Knowledge Management
	N04	Competitive Outcomes
	N05	Campaign Results
	N06	Upcoming Campaigns
	N07	Request Summary
	N08	Requests Assigned to Me
	N09	Requests Initiated by Me
	N14	My Utilization
Portale	N15	Workgroup Utilization
Portals		
	N16	Active Opportunities
	N17	Underutilized Resources
	N17 N18	Underutilized Resources Engagement Warnings
	N17 N18 N20	Underutilized Resources Engagement Warnings Find Person
	N17 N18 N20 N21	Underutilized Resources Engagement Warnings Find Person Opportunity Outcome Summary
	N17 N18 N20 N21 N22	Underutilized Resources Engagement Warnings Find Person Opportunity Outcome Summary My Favorite Reports
	N17 N18 N20 N21 N22 N23	Underutilized Resources Engagement Warnings Find Person Opportunity Outcome Summary My Favorite Reports My Links
	N17 N18 N20 N21 N22 N23 N25	Underutilized Resources Engagement Warnings Find Person Opportunity Outcome Summary My Favorite Reports My Links Opportunity Rollups
	N17 N18 N20 N21 N22 N23 N25 N26	Underutilized Resources Engagement Warnings Find Person Opportunity Outcome Summary My Favorite Reports My Links Opportunity Rollups Opportunities Lost
	N17 N18 N20 N21 N22 N23 N25	Underutilized Resources Engagement Warnings Find Person Opportunity Outcome Summary My Favorite Reports My Links Opportunity Rollups

	PFV	View Portfolios
Project/Customer Portfolios	VCR	View Customer Radar
Prospect and Lead Management	MAL MAP ML MDL MDP	Manage All Leads Manage All Prospects Manage Leads Manage Workgroup Leads Manage Workgroup Prospects
Resource Information	VFO VPO VQO VRO VEM VTO VBR VCS VC	View Function Assignments of Others View Project History of Others View Qualifications of Others View Resource History of Others View Resources View Task Assignments of Others View Billing and Cost Rates in Task Assignment section View Calendars from Resource Search View Billing and Cost Rates in Task Assignment section
	VOC	View Calendar entries of other Resources

CC Note 11: When using Microsoft Surface tablet, ensure to sign into Changepoint using Desktop mode. You must use the Surface tablet with the peripherals attached, to allow hover-overs and scrolling in Changepoint and Changepoint Administration. Do not use the force tablet mode, as it is not supported for the Surface.

CC Note 12: Browser and O/S certification in Changepoint governs IBM Browser and O/S certification where applicable. Browsers used for report authoring in Cognos must be certified by both Changepoint and IBM.

Refer to the Cognos BI 10.2.2 Fix Pack 7 Software Product Compatibility Reports link for details on Web Browser and client O/S support.

From the link below, set the Available Reports field to 10.2.2.7 maintenance level and navigate to the Supported Software tab and then click on the Web Browsers link.

http://www-969.ibm.com/software/reports/compatibility/clarity-reports/report/html/preregsForProduct?deliverableId=1391013543612

CC Note 13: With the introduction of the Personal Credit Card Upload, the Upload link is enabled for expense creation on all certified tablet devices (provided the resource or role has the 'TEX' feature assigned). As the iPad does not support local storage (i.e., File Manager) you will not be able to select a file for upload. iPad users should upload their personal credit card files in Changepoint and then continue with the expense creation on the iPad.

CC Note 14: iOS certification applies to the following devices: iPodTouch iPhone

CC Note 15: Tablet certification applies to the following devices:

*i*Pad

Microsoft Surface (Windows RT)

Nexus 10

CC Note 16: The Mobile App only connects to a site that is configured SSL with a valid SSL

certificate.

Mobile App does not support SSO implementation via ISAPI endpoint. If your organization has deployed an ISAPI endpoint for the Changepoint application, the Mobile App website must be configured to use an ADFS or SAML endpoint or application authentication.

The release of the mobile app 2.0.0 has dependency with the enterprise general patch 18.00.129.000. The mobile app 2.0.0 supports both time management and expense management functionalities, and it is available on the online app Stores.

Client Integration (CI) Notes

CI Note 1: Microsoft Project (MSP) certification consists of Professional and Standard editions. MSP language versions are certified provided the client is running the same corresponding language O/S.

For more information about client integration requirements, refer to the Microsoft links below:

Microsoft Project 2013, SP1, or Microsoft Project 2016

Refer to Microsoft's website at: www.microsoft.com

Microsoft Project 2013 and Microsoft Project 2013 SP1 users will require Microsoft hotfix KB2882986 installed on their client machine otherwise they will see a notification message and not be able to link to Microsoft Project in Changepoint. To download the hotfix refer to:

http://support.microsoft.com/kb/2882986

- **CI Note 2:** For Outlook 2013 and Outlook 2016, Microsoft Office PIA component is no longer a requirement.
- CI Note 3: Regional Options are configured for the computer in the Control Panel. The Regional Options selected determine how the number, currency, time and date values will be displayed for Outlook Integration
- CI Note 4: Microsoft Visual Studio 2010 Tools for Office Runtime and Microsoft Visual C++ 2010 Redistributable are required and will be installed via the Add-in installer.

 The Changepoint Excel Expenses Template add-in requires the Changepoint WCF

API for the Excel expense templates to function correctly. The Changepoint Add-in installers do not install the Changepoint WCF API.

The Changepoint WCF API is supported for the ISAPI and ADFS endpoints for SSO implementations only. If you have deployed a SAML endpoint for the Changepoint application, then the Changepoint API website must be configured to use application authentication. For more information about installing the API, see the *Changepoint API Installation Guide*.

Refer to Microsoft's website for detail on Visual C++ 2010 Redistributable: http://www.microsoft.com/en-us/download/details.aspx?id=14632

CI Note 5: The SQL native client version must be consistent with the Microsoft SQL Server version on your Cognos Content Store and Changepoint database server.

The Microsoft .NET Framework is required for the Changepoint-Cognos Sync utility on Windows 7 clients. The installers will not install .NET Framework on the client machine. If you are installing this utility on a Windows 8.1 Update O/S or on a Windows 10 client, in order to install the prerequisites, .NET Framework 3.5 must be enabled manually in addition to NET Framework 4.6.2

CI Note 6: The credit card integration is supported on a tablet (not on a smartphone mobile device) in addition to a typical client running on a desktop/laptop. Depending on the tablet manufacturer, the ability to upload the credit card transaction may not be available. The ability to create an expense from a credit card transaction is available on all certified tablets (provided that the transactions are uploaded prior to using the tablet).

The credit card integration requires a browser with HTML5 file API support. Certification is restricted to the stated browser versions; in particular only IE 10 and IE11.

Microsoft Hot Fix Certification

 Changepoint 2017 has been certified with Microsoft Hot Fixes as of March 31, 2017. See the published list from the Microsoft site at URL: http://www.microsoft.com/technet/security/current.aspx

The certified Microsoft Hot Fixes conform to the Third Party Software Support Policy. This policy is available in Team Folders or from your Client Manager or Project Manager.