



Changepoint 2017 SP1

Product Architecture and Technology Matrix

Version 1.2

Revision History

Revision	Comments	Date
1.0	CP2017 SP1 GA	March 30, 2018
1.1	Added certification for SQL Server 2017	April 24, 2018
1.2	Removed the 'Utility content is English only' content for Changepoint – Cognos Sync Utility	May 2, 2018

Table of Contents

Revision History2

Purpose.....2

 Reading the tables2

Server Components (SC)2

 Changepoint Windows Services (WS).....6

 Changepoint Integration Framework Services.....7

Server Additions and Integrations (SAI)7

Client Components (CC)9

 Client Platform – Changepoint9

Client Integrations (CI)12

Server Component (SC) Notes.....13

 Introduction.....13

Server Additions and Integrations (SAI) Notes16

 Introduction.....16

Client Component (CC) Notes.....17

 Introduction (applicable to all clients/devices)17

 Microsoft Windows Introduction.....18

Client Integration (CI) Notes24

 Microsoft Hot Fix Certification25

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Any links given within this document are valid at the time the document is originally posted, but may become outdated over time.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

Operating System

- Windows Server 2012, R2 [SC Note 1](#)
- Windows Server 2016

Database Version

- SQL Server 2014, SP1, SP2 [SC Note 3](#)
- SQL Server 2016 CU4 and above, SP1(CU1 and above)
- SQL Server 2017

Database Server

.NET Framework Version

- .NET Framework 4.7.1

[SC Note 4](#)

Additional Software

- MS Office 2010 System Converter Microsoft Filter Pack

[SC Note 6](#)

Server Language Support

- English
- French
- German
- Spanish
- Dutch

[SC Note 5](#)

Web Server

Operating System

- Windows Server 2012, R2
- Windows 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 4.7.1

[SC Note 4](#)

Additional Software

- Microsoft Office Web Component Version 11.0 (owc11.exe)

[SC Note 2](#)

Server Language Support

- English
- French
- German
- Spanish
- Dutch

[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
 - 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 4.7.1

[SC Note](#)
[7](#)

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.

IBM Cognos Analytics

Cognos App Tier

- IBM Cognos Analytics (version 11)
- 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)
- SQL Server 2017

[SC Note 8](#)

For details, see the *Installing and Configuring Cognos Analytics* chapter in the *CP2017 SP1 Upgrade 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
- SQL Server 2017

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	<ul style="list-style-type: none">• 64 bit O/S support
CP Exchange Synchronization Service	<ul style="list-style-type: none">• 64 bit O/S support• Exchange Web Services
CP Mail Service	<ul style="list-style-type: none">• 64 bit O/S support
CP Report Prerender Service	<ul style="list-style-type: none">• 64 bit O/S support• Microsoft Internet Explorer 11 (minimum)
CP Report Scheduler Service	<ul style="list-style-type: none">• 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 Integration Framework Service

CP Export Publishing Service	<ul style="list-style-type: none">• 64 bit OS support
CP DataMapper Service	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 64 bit OS support• Can be installed on any machine that can communicate with Microsoft Service Bus

American Express Corporate Credit Card Integration

American Express Corporate Credit Card Integration	<ul style="list-style-type: none">• Support for AMEX (American Express) GL1025 standard, version 4.4 file format	SC Note 9
--	--	---------------------------

Server Additions and Integrations (SAI)

Server additions can only be installed on the following platforms.

Platform			
Operating System	• Windows Server 2012, R2		SC Note 1
	• Windows Server 2016		
.NET Framework Version	• .NET Framework 4.7.1		SC Note 4
Additional Software	• N/A		
Server Language Support	• English	• Spanish	SC Note 5
	• French	• Dutch	
	• German		

Server Additions and Integrations			
API:	• .NET Framework 4.7.1 (server)		SAI Note 1
	• Microsoft IIS		SAI Note 2
Web Services API/WCF API	• Language software on the servers must be consistent.		SAI Note 5
	• 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 <i>Changepoint API Reference</i> and the <i>Changepoint API Installation Guide</i>		
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)		SAI Note 3
	• Changepoint SFDC Adapter		
	For details, refer to the <i>Changepoint Integration Framework Services</i> section in this matrix as well as the <i>Changepoint Integration Framework Reference</i>		
Microsoft Dynamics GP Toolkit	• Microsoft Dynamics GP 2015R2		SAI Note 4
	For details, see the <i>Microsoft Dynamics GP Toolkit Administration Guide</i>		

Server Additions 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-STC_ADFS endpoint) [SAI Note 5](#)
- SAML 2.0 – ADFS 2.0 (RP-STC_SAML endpoint)
- SAML 2.0 – PingFederate version 7.2 (RP-STC_SAML endpoint)
- ISAPI (RP-STC_ISAPI endpoint)
- Windows Azure Active Directory
- Windows Powershell 2.0 for running configuration scripts to aid with the setup

For details, see the *Installing and Configuring Single Sign-on* chapter in the *Changepoint Installation Guide*.

Transport Tool

- Changepoint 2017 Transport Tool (English Only)

For details, see the *Changepoint Transport Tool User Guide*

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) [CC Note 7](#)
- Windows 8.1 Update (KB2919355). (Desktop Mode only) (32 or 64-bit)
- Windows 10 (32 or 64 bit)

Web Browser

- Internet Explorer 11 (32-bit browser only) [CC Note 4](#)
- Firefox ESR 45, ESR 52 [CC Note 8](#)
- Chrome 64 [CC Note 9](#)

.NET Framework Version

- .NET Framework 4.7.1 [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
- Spanish
- Dutch
- Brazilian-Portuguese
- Italian [CC Note 2](#)
[CC Note 3](#)

Apple Mac				
Operating System	<ul style="list-style-type: none"> MAC OS X 10.12 			
Web Browser	<ul style="list-style-type: none"> Firefox ESR 45, ESR 52 Safari 10 			
Additional Software	<ul style="list-style-type: none"> Microsoft Silverlight 5.1.20913 plug-in CC Note 5 			
Client Language Support	<ul style="list-style-type: none"> English French German 	<ul style="list-style-type: none"> Spanish Dutch Brazilian-Portuguese 	<ul style="list-style-type: none"> Italian 	CC Note 2 CC Note 3

Client Portal				
Operating System	Refer to <i>Client Platform – Changepoint</i> section above			
Web Browser	<ul style="list-style-type: none"> Internet Explorer 11 (32-bit browser only) CC Note 4 Firefox ESR 45, ESR 52 CC Note 7 Chrome 64 Safari 10 (on a MAC O/S) 			
Client Language Support	<ul style="list-style-type: none"> English French German 	<ul style="list-style-type: none"> Spanish Dutch Brazilian-Portuguese 	<ul style="list-style-type: none"> Italian 	CC Note 2 CC Note 3

Report Designer - Microsoft Windows O/S and IE only				
Operating System	<ul style="list-style-type: none"> Windows 7 SP1 (32 or 64-bit) CC Note 7 Windows 8.1 Update (KB2919355). (Desktop Mode only) (32 or 64-bit) Windows 10 (32 or 64 bit) 			
Web Browser	<ul style="list-style-type: none"> Internet Explorer 11 (32-bit browser only) CC Note 9 			
.NET Framework Version	<ul style="list-style-type: none"> .NET Framework 4.7.1 			
Additional Software	<ul style="list-style-type: none"> N/A 			
Client Language Support	<ul style="list-style-type: none"> English French German 	<ul style="list-style-type: none"> Spanish Dutch Brazilian-Portuguese 	<ul style="list-style-type: none"> Italian 	CC Note 2 CC Note 3

Mobile App for Smartphones and Tablets

Operating System	iOS 9 or higher Android 4.4 or higher	CC Note 16
Web Browser	<ul style="list-style-type: none"> Native browser for device 	
Screen Size	<ul style="list-style-type: none"> Minimum: Width: 640, Height: 960 Maximum: Width: 1440, Height: 2560 	
Client Language Support	<ul style="list-style-type: none"> English French German Spanish Dutch Brazilian-Portuguese Italian 	CC Note 2 CC Note 3

Mobile Web for Smartphones

Operating System	<ul style="list-style-type: none"> Apple iOS 9.3 or higher Android 6.0 or higher 	CC Note 14
Web Browser	<ul style="list-style-type: none"> Native browser for device 	
Client Language Support	<ul style="list-style-type: none"> English French German Spanish Dutch Brazilian-Portuguese Italian 	CC Note 2 CC Note 3

Tablet Support

Operating System/Web Browser	<ul style="list-style-type: none"> 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 64 	CC Note 10 CC Note 11 CC Note 13 CC Note 15 CI Note 6
Client Language Support	<ul style="list-style-type: none"> English French German Spanish Dutch Brazilian-Portuguese Italian 	CC Note 2 CC Note 3

Cognos Client O/S and Browser Support

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)
- Refer to Cognos BI 10.2.2 Fix Pack 7 Software Environments link for details on supported O/S.

[CC Note 12](#)

Web Browser

- Web browsers for Cognos report authoring and report rendering
- Internet Explorer 11
 - Firefox ESR 45, ESR 52
 - Chrome 64

Intelligent Forms Client O/S and Browser Support

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)

Web Browser

- Internet Explorer 11
- Firefox ESR 45, ESR 52,
- Chrome 64

Microsoft Office

- Microsoft Office 2013 SP1
- Microsoft Office 2016

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 Integrations

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)**

[CI Note 1](#)
[CI Note 3](#)
[CC Note 1](#)

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 4.7.1**

[CI Note 2](#)
[CC Note 1](#)

For details of installation, refer to the *Changepoint User Basics User Guide*.

Outlook Tools Regional Setting Support

- English

[CI Note 3](#)

Changepoint Excel Expenses Add-in

- **.NET Framework 4.7.1**
- 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 4.7.1**
- Microsoft SQL Server Native Client 2012 SP1

[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 64**
- **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, SQL Server 2016 and SQL Server 2017

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 4.7.1 refer to:

<https://www.microsoft.com/net/download/dotnet-framework-runtime>.

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, .vss, .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/Microsoft/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 4.7.1

SC Note 8: The Cognos App Tier installer has a dependency on .NET Framework 4.5 (minimum) in order for the installer to launch.

Refer to Cognos BI 11.0.9 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 *11.0.9.0* and navigate to the Supported Software tab.

<https://www.ibm.com/software/reports/compatibility/clarity-reports/report/html/prereqsForProduct?deliverableId=C2ACFFC08DA411E7A1A213628837956C>

Cognos web components must be installed on each Changepoint websites that have been enabled for Cognos Analytics.

Microsoft SQL Server Native Client is installed on the Cognos App Tier via the installer.

The Content repository, containing content manager service, is installed on the Cognos App Tier. Full Cognos App Tier installation requires 7 GB of disk space.

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

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 SQL 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.

<http://www.microsoft.com/en-us/download/details.aspx?id=49496>

SAI Note 4: SQL_Latin1_General_CP1_CI_AS

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

Microsoft 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.

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 de-select 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
Candidate Screening	ACS ARS RMA RMC RMD RMM RMV	Access Candidate Screening Access Request Screening Approve Resource Demand Scenarios Create Resource Demand Scenarios Delete Resource Demand Scenarios Edit Resource Demand Scenarios View Resource Demand Scenarios
Initiative management	ARR FRR TRR URR VRR	Adjust Revenue Recognition Process Final Revenue Recognition Process Tentative Revenue Recognition Update Revenue Recognition Settings View Revenue Recognition Reports
Import/Export Management	ID ED	Import Data Export Data
Individual Performance Management	ICM IDM IEM ISM IVD IVM IVP IVR IVW	Create Metrics Delete Metrics Edit Metrics Performance Management Administrator View My Workgroup Metric Results (Drill-Down) View Metrics View Personal Metrics Results View Metric Results of Any Resource View Workgroup-Level Rollup of Metric Results
Operations Center Management	CA DA MA	Create Assets Delete Assets Edit Assets

Category	Feature Code	Feature Description
Portals	N28	Financial Reminders
	N29	My Performance Chart
	N30	People Performance Management
	N31	Surveys
Report Features	ARF	Report Designer Advanced Features
	RPD	Report Designer (Access the Report Designer application)
	RPS	Report Scheduling
Resource Information	VR1	View Survey Rating Information
	VSO	View Surveys of Others
Survey Management	SVA	Survey Management Administrator
	SVC	Create Surveys
	SVR	View Surveys
	SVT	Create Survey Templates

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>

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

Desktop Features	AT	Create Time Adjustments
	CT	Copy Time
	MTK	Manage Tasks (Project Planning Worksheet only)
	TTN	Track Non-Project-Related Time
	TTP	Track Project-Related Time
	TTR	Track Request Time
	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
Knowledge Management	VKM	View Knowledge Items
	VSI	View Support Items
Operations Center Management	VRQ	View Requests
Portals	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
	N15	Workgroup Utilization
	N16	Active Opportunities
	N17	Underutilized Resources
	N18	Engagement Warnings
	N20	Find Person
	N21	Opportunity Outcome Summary
	N22	My Favorite Reports
	N23	My Links
	N25	Opportunity Rollups
	N26	Opportunities Lost
	N27	Opportunities Won
	N34	Access the Portfolio Performance Management portlet
Project/Customer Portfolios	PFV	View 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 VOC	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 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 Cognos BI 11.0.9 Software Product Compatibility Reports link for details on supported client O/S and web browser.

From the link below, set the Available Reports field to *11.0.9.0* and navigate to the Supported Software tab.

<https://www.ibm.com/software/reports/compatibility/clarity-reports/report/html/prereqsForProduct?deliverableId=C2ACFFC08DA411E7A1A213628837956C>

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:

iPad
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.