

Siebel CRM Innovation Pack 2017



Oracle's Siebel CRM Innovation Pack 2017 is packed full of new features and enhancements that revolutionize business agility and developer experience, providing benefits for all types of roles. A modern business agility process and new development paradigm is realized. Many of the new features will drastically reduce the total cost of ownership for Siebel customers. Siebel Composer becomes a reality, incorporating Web Tools, Workspaces, and Approval Manager. New tools are available for application configuration, deployment, and migration. A complete new Test Automation Suite for Open UI is also provided. Siebel CRM Innovation Pack 2017 is a landmark release delivering a more agile CRM application and ensuring investment longevity.

SIEBEL CRM

The most adaptable CRM solution available for On-Premise and On-Cloud

- Siebel CRM plays an important role within all of Oracle CX combining to deliver customer experience across multi-channels such as mobile, in-store, field service, etc.
- Core CRM system that leverages a large breadth of different Oracle best-of-breed foundation tools.
- 21 Industry solutions with specific, tailored capabilities
- 22 languages supported in a single application repository
- Siebel CRM complements Oracle Cloud solutions, enabling businesses to choose the solution that's right for them.
- Siebel CRM is now available to be deployed On-Cloud with the Oracle Infrastructure-as-a-Service (IaaS) platform.

Innovation Pack Themes

The Siebel CRM product focuses on the following primary investment themes based on the feedback of our customers:

- **Customer Experience (CX).** Seamless customer experience across the CX portfolio (mobile, social, service, etc.)
 - **Industry Innovation.** Feature-rich solutions for over 20 industries, as well as industry-specific mobile applications.
 - **Business Agility.** We recognize that your business needs to be agile with the ability to adopt new product innovations as well as competitive market solutions into your CRM deployment quickly.
 - **Cloud Ready.** Siebel CRM On-Cloud is now available and you can confidently take your investment to the next level and host your application in the most suitable cloud deployment model for your enterprise. Oracle offers cloud hosting options for Siebel CRM today with the Oracle Cloud Platform and Oracle Managed Cloud Services.
- Siebel CRM integrates with the Oracle Cloud CX suite including Oracle Sales Cloud, Service Cloud, Marketing Cloud, Social Cloud, and other ecosystem cloud products to enable modern features, creating complete and memorable customer experiences.

WORKSPACES

Workspaces are enhanced from Innovation Pack 2016 and now include the following capabilities:

- Configure Siebel CRM application in a browser
- Uses Open UI & emulates Siebel Tools
- Eases migration of existing Siebel Tools users
- Web Template editor with smart editing and preview
- Private & Shared workspaces for configuration changes
- Preview & Publish configuration changes without downtime
- No more SRF; no need for Siebel Server restart after making configuration changes

PARALLEL DEVELOPMENT

- Ability to work on multiple releases, simultaneously
- Integration Workspaces represent a release e.g. Summer Release & Winter Release; team development in parallel
- Deeper hierarchy of workspaces
- Integration Workspaces & Developer Workspaces
- Developer Workspaces represents a private space for localized development
- Distributed, collaborative, parallel, development is now a reality, increasing agility and productivity for Siebel Developers.

Business Agility

Siebel Composer

Siebel Composer encompasses many extensive new features added to the product to increase the agility with which enterprises can configure their Siebel CRM applications. These features include:

- » Zero Downtime for the deployment of configuration changes – the compiled Siebel repository has moved from an SRF file into the database.
- » Web Tools is a browser-based alternative and long term replacement for Siebel Tools, with similar interaction patterns, ensuring seamless transition working between both of the development tools available for application configuration.
- » Workspace-based configuration provides a modern development experience between teams of distributed developers, removing the need for local databases.
- » Capability to preview Workspace changes in the application in real-time before delivering any changes.
- » Web Template files are moved to the Siebel Repository and available in Web Tools
- » The “Edit Web Layout” feature is available directly within Web Tools
- » Siebel Tools is retained for certain specialized configuration tasks, such as Scripting, Workflow editing, etc.

Some of the key capabilities and benefits delivered include:

Parallel Development with Workspaces

This enhancement for Workspaces provides the ability to support parallel, multi-release development. It allows the creation of multiple “integration” branches or Workspaces that can be used as delivery targets for integrating development changes across different releases or teams. Developers can create private Workspaces from integration branches and deliver their changes back into the corresponding integration branch as and when they want, without waiting for other developers to finish their own individual work.

Additionally, integration branches are published and deployed into the Runtime Repository for optimal runtime performance of the application.

Seed Data Managed within Workspaces

This enhancement enables the management of Seed Data in Workspaces. This allows development and deployment of configuration changes involving metadata and seed data to be managed together in a uniform manner.

Multi-language and non-ENU Support for Composer

With this capability, Siebel CRM applications running in Composer mode can be deployed in multiple languages from a single repository without the need for the compilation of the traditional Siebel Repository File (SRF) per language. Metadata for

DYNAMIC SCALABILITY

The Siebel CRM application can now be dynamically scaled up and down easily and through the browser.

New enhancements make deploying Siebel CRM in the Cloud a logical step forward and the application is now easier to maintain on Cloud platforms

MIGRATION TOOLS

New features include:

- More intuitive application migration
- Simplified migration process of artifacts between environments
- No extra license cost
- Enhanced security model

all deployed languages can be centrally published into the Runtime Repository to enable global deployment catering to multiple languages.

Web-based Configuration Management Console with Elasticity and Dynamic Registration of Servers

Innovation Pack 2017 introduces a new web-based management console that customers can use to configure and deploy Siebel applications from a web browser. Further, the existing Gateway component is replaced with a new dynamic Gateway that enables dynamic configuration, deployment, and scaling of Siebel Servers and components.

Some of the key capabilities and benefits delivered include:

- » Web-based management console for configuration and provisioning of a Siebel CRM deployment
- » Dynamic, centralized, and highly available enterprise configuration store for managing all Siebel CRM configuration and administration information.
- » Elastic scaling and load-balancing with built-in service registration and service discovery of Siebel CRM application services.
- » Replacement of Siebel Web Server Extensions with a Java Enterprise Edition Web Profile-compliant Web Server Module

Migration and Management Tools to Simplify 'Dev-to-Test' and 'Dev-to-Prod' Transitions

Environment Migration has been transformed from a combination of UI wizards, Application Deployment Manager scripts, command-line utilities, manual export and import of data, and manual setup steps into an intuitive, all-in-one, browser-based interface to simplify migration and minimize the chance of error in migrating development changes to the Test and Production environments.

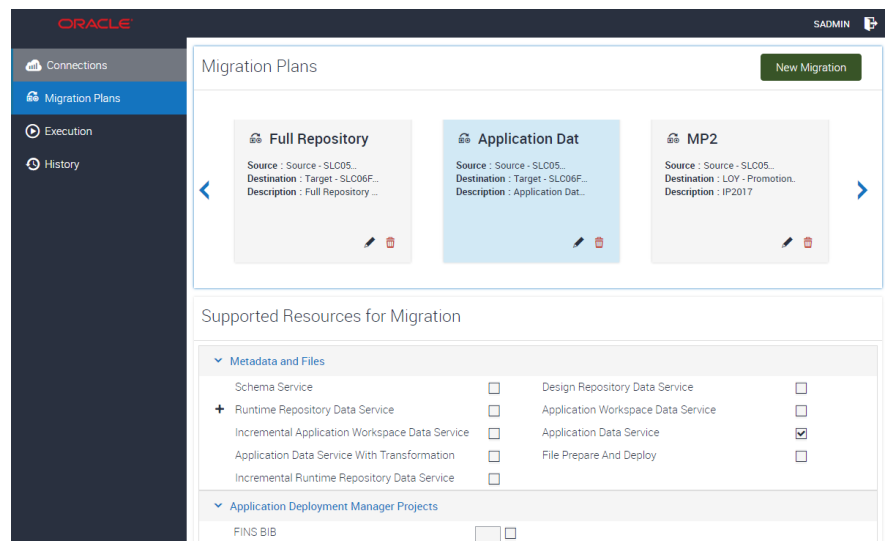


Figure 1: New intuitive Application Migration Toolkit simplifies the migration process

Some of the key capabilities include:

- » Support for initial full migration from one Siebel instance to another
- » Incremental migration
- » Support includes migration of configuration, file artifacts, and database artifacts
- » Enhanced upgrade framework, making Siebel CRM even more adaptable for Cloud (IaaS) platforms such as Oracle Public Cloud.
- » Enhanced capabilities to support easier upgrade and migration from a file-based metadata store to the database-based metadata store used by Siebel Composer
- » Simplified and standards-based security model via SSO and SAML 2.0, while removing non-standard Windows Integrated Option and Digital Certificate based authentication options in support of better standardization, providing improved security.

TEST AUTOMATION

New features include:

- Complete new Testing Suite at no extra license cost.
- Intuitive Record and Playback approach to test execution
- Save money regression testing your application after a new release or update

Open UI Test Automation

Innovation Pack 2017 provides abilities to record user scenarios in the UI and play them back within the application at any time. The playback recreates the functional flow in the same manner as users would interact with the application and detects any unintended regression behaviors.

The recording of tests can be stored within the Siebel CRM application and used for validation when required. The results of running the tests can also be stored for analysis.

The primary goal of this Test Automation suite is to significantly lower the costs of application testing and maintenance. The complexity of programming UI automation and the costs of maintaining tools, tests, and skills are eliminated. Test Automation enables business users to record automated scenarios and tests for demo and training purposes or regression testing before rolling out new releases.

Following are the key features and abilities:

- » Record a user scenario using an intuitive tool bar with Start, Pause, Resume, Stop, and Annotate features
- » Store and organize the recorded scenarios in the Siebel CRM database
- » Playback the recorded scenarios in single or batch mode
- » Modify the recorded scenarios or Test Scripts, if and when required. Add verifications at different points in Test Scripts. Play the single test to validate it.
- » Review and analyze the results of playback or test runs within Siebel CRM, or using Analytical tools such as Oracle Business Intelligence (OBIEE)
- » An end-to-end Test Management repository for Test Scripts, Test Sets, Master suites, Test cycles, and Test Results analysis
- » Batch Test Automation via the Jenkins plug-in to orchestrate automation batch test runs across multiple servers and clients

Platform Updates

Siebel CRM Innovation Pack 2017 introduces the following new options with respect to platform support:

- » Oracle Access Manager 11 and 12 versions with 64-bit support for the Siebel Application container/interface are now supported
- » Microsoft Windows 2016

- » DB2 LUV v11.1/ DB2 v11.1
- » DB2 client and DB2 Connect 11.1
- » Oracle BI Publisher 12

The following platforms/technologies have been deprecated:

- » Oracle JDK is no longer required on Application Servers
- » Oracle Access Manager 32-bit version support has been deprecated
- » IBM AIX 6.1 is removed due to end of mainstream support
- » Microsoft Windows 2008 is removed due to end of mainstream support
- » Microsoft SQL Server 2008 is removed due to end of mainstream support
- » Oracle Database 11g and Oracle Cluster 11g is removed due to end of mainstream support
- » External web servers (Oracle IPlanet and Oracle HTTP server, Apache HTTP, and Microsoft IIS) are no longer required having been replaced by the out-of-the-box packaged Siebel Web Application Server, Application Container, and Application Interface managed via the Siebel Management Console.

Email Marketing Server

The Email Marketing Server components—the Email Sending Daemon (ESD), Bounce Handler Daemon (BHD), Click Through Daemon (CTD), and Web Survey Daemon (WSD)—are now installable on any supported platform using the same Install Anywhere–based installation media, reducing the time and effort required, particularly on non-Windows platforms. In addition to making it easier to install these components on all platforms, they all now support Java 1.8.x and Tomcat 8.x, ensuring they are leveraging the latest, most secure and feature-rich versions of each product.

Siebel Cloning Utility

The Siebel Cloning Utility is no longer supported in IP2017. The same functionality can be achieved through the use of Profiles within the Siebel Management Console.

Oracle Secure Enterprise Search

Oracle Secure Enterprise Search will reach its end of life in January 2018. Innovation Pack 2017 release continues to support Oracle Search Enterprise Search integration but customers are encouraged to migrate to a different 3rd party search engine using the Plug and Play Search architecture as this integration will no longer be supported beyond Siebel 17.x.

Customer Experience

The following features that pertain to customer experience have been introduced in this release:

Standards-Based REST Interface Fully Provisioned within Siebel CRM

The Siebel CRM RESTful Web API is being further enhanced in Innovation Pack 2017 to include:

- » Catalog of Siebel CRM REST services

- » Swagger-based description of the REST API (Data, Repository, Services)
- » Siebel REST infrastructure for making outbound calls to external REST APIs via proxy Business Services and Integration Objects created by importing Swagger compliant descriptions of external REST APIs
- » Ability to tailor Siebel REST response content--e.g., limit fields or child links in response

Security Changes and Enhancements

Starting with Innovation Pack 2017, Siebel CRM will...

- » Not support digital certificate-based authentication.
- » Not support Windows Integrated Authentication (as it is not a cross platform capable technology)
- » Not offer "Remember User ID" features in the login applets for security reasons. This is better handled by browsers and third parties

DISA FRAMEWORK

Enhancements in Innovation Pack 2017:

- Integrated IE web notifications with Siebel CTI and Chat
- Enabled multi-file read-only access
- Citrix multi-user environment support

Desktop Integration Siebel Agent (DISA) Enhancements

Desktop Integration Siebel Agent (DISA) is a WebSocket-based framework, designed to support the specific features affected by NPAPI deprecation. The WebSocket protocol is well supported in most major browsers being used today. The framework enables bi-directional, real-time communications between browsers (acting as WebSocket clients) and a WebSocket Server, which is implemented as a local application running on the user's desktop.

From DISA version 2.0.11 and later, the DISA framework can be extended by customers to provide customized functionality. This will help customers to fulfill any desktop integration requirements by using DISA's ability to act as a bridge between the Siebel Open UI application running in a browser and local desktop files, resources, and programs. This will increase user productivity and work efficiency.

Here is the overall workflow of the DISA framework:

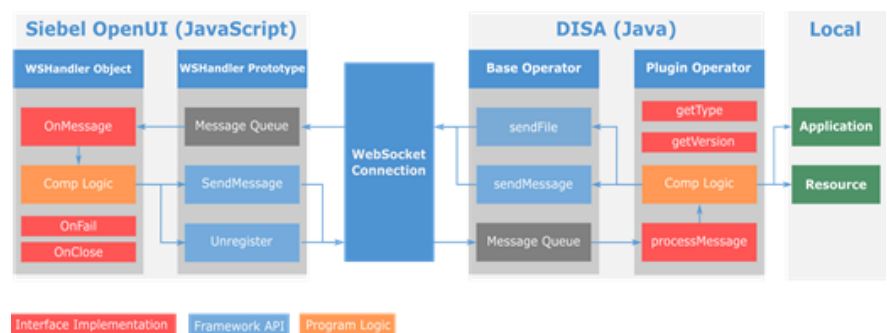


Figure 2: DISA framework workflow

Web Notifications

Support for web notifications is recommended by the [W3C](#). While native support was already available in Chrome and Firefox, with the DISA enhancements, Internet Explorer now includes similar functionality and Siebel Call Center can agents now benefit from the "IE Web Notification" feature supported by DISA. When a new CTI call or chat request arrives, the agent will get notified by a pop-up alert window issued by

DISA. Upon clicking on this window, the agent will be routed back to Siebel Call Center so that the agent can easily take up a new call or chat request. This feature will help Call Center agents manage their work more efficiently and be more productive.

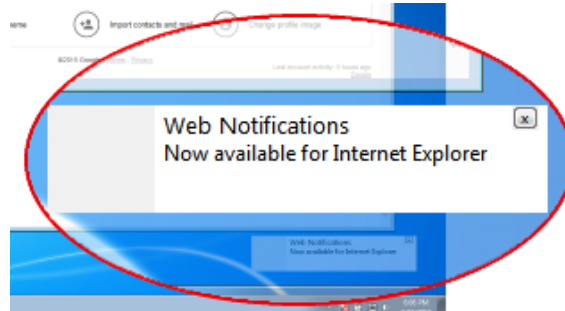


Figure 3: Web Notifications

Citrix Multi-User Environment Support

In Citrix multi-user environments, DISA instances for different users cannot share the same port. A unique port number needs to be assigned to each user on the same machine. This limitation is addressed by capabilities provided with DISA 2.17.4+ and Siebel CRM PatchSet 16.2+ or IP2017. Refer to Bookshelf for specific implementation steps.

Inline Attachment Editing Enhancements

This new DISA enhancement incorporates auto detection and support for multiple files with read-only access.

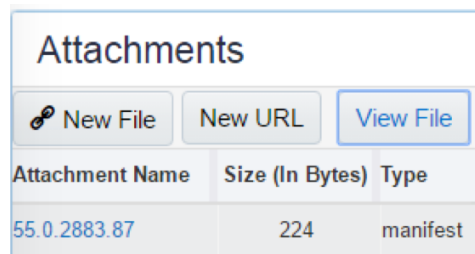


Figure 4: Attachments now have the ability to View a file without editing it

To find out more about how to develop custom plug-ins based on DISA APIs and integrate them with the DISA framework, refer to [DISA Development Guide and Sample Code](#).

For more information about Desktop Integration Siebel Agent, refer to: *Install and Deploy Desktop Integration Siebel Agent (DISA)* (Doc ID [2107511.1](#)).

Support for Oracle BI Publisher 12c Integration

Oracle Business Intelligence Publisher (BI Publisher) continues to be an extremely efficient and highly scalable enterprise reporting solution for Siebel CRM

implementations. With Innovation Pack 2017, support for Oracle BI Publisher 12c for reports generation is added.

With this integration, customers can leverage investments in Oracle BI 12c infrastructure with Siebel CRM. Support for BI Publisher 11g integration also continues.

User Experience Enhancements

Two important improvements in the Open UI user experience include:

- » List applet scrolling enhancements
- » Open UI login time improvements

List Applet Scrolling

List applet scrolling has been improved, providing a more intuitive and logical scrolling behavior. Users can now move directly to the last records in the data set or click/touch and hold navigation icons to traverse through records in a list applet in sets of ten as opposed to scrolling individually through the records in the list applet.



Figure 5: New list applet scrolling icons

Open UI Login Time

The Siebel CRM client framework has been optimized to reduce the Open UI login time, thus making the login process much faster for a user. This makes better use of the application cache in order to populate objects more intelligently in the UI, only loading what is required at the right time and loading other objects into cache at a later time.

Column Alignment

Starting with Innovation Pack 2017, list applet column alignment adheres to the following guidance for all displayed content:

- » Currency columns are right-aligned
- » Numeric columns are right-aligned
- » CHAR(1) columns are center-aligned (e.g., Boolean fields, such as checkboxes)
- » Fields mapped to icon maps are automatically center-aligned
- » All the other data fields (e.g., text) are left-aligned

NOTE: The left/right alignments are reversed for RTL languages.

Tab Order

A new user property named “DisableSiebelTab” is introduced for the Application Object in the Siebel Repository. From Innovation Pack 2017, the TAB order will be based on the DOM order. After the last element, the tab will focus to next element on the browser instead of focusing on the Siebel File menu, unless the “DisableSiebelTab” parameter is set to False.

Industry Innovations

Specific industry innovations introduced in this release are described below.

Consumer Goods Mobile

Siebel Consumer Goods Mobile has been enhanced to include Direct Store Delivery functionality in connected mode. This enhancement for Siebel Consumer Goods Mobile will help customers move from the old Handheld solution to mobile devices.

New specialized buttons in the mobile application have the following functionality:

Sales Orders

The complete Sales Order process is supported. Specialized logic has been introduced for Invoices, Book, and Open buttons on the Sales Order Screen. This will allow a Van Sales representative to create an invoice, book an order, or change the status of an order at the time of order creation.

When creating a retail order, the will see products taken from the distribution list for that particular account, making it easier to find and select the correct products. List Price and List Tax fields are automatically populated based on the products listed. Values for Bonus Quantity and Extended Tax and Price are calculated based on the quantity.

When the representative generates an invoice, validation on each line item is performed to see if there is sufficient on-hand stock to fulfill the order. Finally, the Print button prints the Sales Order with the associated line items.

Returns

New functionality for Print and Credit is available on the Return Order Line Items screen.

This allows a Van Sales representative to check to see if the customer has items to return. If so, a Return Merchandise Authorization (RMA) can be generated with a credit note along with updates to inventory and invoice status.

If there are no returns, the representative can change the status of the Return Order activity to Acknowledged in the Visit Activities view of the Outlet Visits screen.

Billing

New specialized logic for Pay, Deliver, Cancel, and Visit Home buttons are available on the Invoice Line Items and Invoice Payments views.

This allows a Van Sales representative to create a Sales order and eliminate out-of-stock situations.

Once an order has been created, it is possible to Deliver and complete the Payment process.

Deliver does the following:

- » Updates the inventory base on the order.

- » Changes the status of the invoice.

Pay does the following:

- » Navigates to the Invoice - Payments view.
- » Opens up the earliest available payment.
- » Communicates the Unallocated Amount that can be applied to this invoice and commit the payment.

Making Payment does the following:

- » Changes the status of the Invoice to Paid or Partially Paid.
- » Takes the user to the Billings view that has a list of all payments that have been made to this Invoice.

It is also possible print an invoice for the order.

New Views

Views that previously existed in Siebel Handheld are now available in the Consumer Goods Mobile application.

- » My Invoices View (Invoices screen)
- » Invoices Line Items View (Invoices screen)
- » Invoice Payments View (Invoices screen)
- » Value Reconciliation View (Invoices screen)
- » Payment Reconciliation
- » Deposit History (Deposit screen)
- » Create Deposit (Deposit screen)

Picture Capture

This feature allows use of a device's camera to capture images of the shelf and aisles during a Merchandising Audit / Compliance Check. The list of aisles, bins, and shelves assigned to the audit are created automatically when you tap on the Merchandising Audit link.

Signature Capture

This feature allows for a signature to be captured directly in the mobile application. Signature Capture is available from the Return Order Line items and Invoice Line Items views.

Clinical Trials Management System

There are two major new features added to the Clinical Trials Management System (CTMS) in this release.

Mobile - Disconnected for Site Visits

In this release, it is now possible to perform Site Visits and complete trip reports in offline mode:

- » All Site Visits
- » My site visits
- » Current Trip follow-up items
- » All follow-up items

- » Site Contacts
- » CRF tracking
- » Checklist Activities

This feature is especially important for organizations who routinely conduct investigator site visits in areas where an Internet connection is less likely to be available at the investigator site or whilst in transit. This usability improvement increases the efficiency of a Clinical Research Associate (CRA) and also provides the ability for CRAs to complete trip reports while at investigator sites that do not have Internet connectivity within their facilities.

Risk Assessment and Categorization Tool (RACT)

To align to industry standards for risk assessment for clinical trials, the Siebel CTMS RACT feature has been enhanced to fully mirror the functionality in the TransCelerate RACT tool.

- » Addition of probability, detectability, and weight fields to enable automatic individual risk score calculation
- » The out-of-the-box individual risk score formula can be customized if required.
- » There are new fields available to capture additional information for each risk:
 - Considerations
 - Category
 - Impacts to functional plans
 - Rationale for category risk level assessment
 - Functional Plan(s) Impacted
 - Mitigation/Comments

Name	Template Name	Description	Updated	Score	Percent	Maximum Score
Site Assessment - Risk Assessment - The Risk Assessment/9/2017 07:39...				89	10.8 %	854

Order	Category	Questions	Impact	Probability	Detectability	Weight	Risk Score	Risk Level	Rationale	Functional Impact	Mitigation
1	Safety	Per the MST Chair with Medical Leader...	High Impact (3)	Medium Probability (2)	Easy to detect (1)	1	6	Program	Not applicable	Safety Plan	medical monitoring of related ev...
2	Safety	Is the compound a marketed product?	Medium Impact (2)	Low Probability (1)	Easy to detect (1)	1	2	Program	Not applicable	Medical Monitorin...	if no, level of scrutiny and frequ...
3	Safety	Is the risk greater than or less than the...	High Impact (3)	High Probability (3)	Difficult to detect (3)	1	27	Program		Data Plan	
4	Safety	Does this compound/class have any se...	Low Impact (1)	Low Probability (1)	Easy to detect (1)	1	1	Program	Not applicable	Statistical Analys...	
5	Safety	Are there any specific Health Authority...	High Impact (3)	High Probability (3)	Easy to detect (1)	1	9	Program/Proto...		Monitoring Plan	appropriate controls as needed...
6	Safety	Is the compound known to have any se...	Low Impact (1)	Medium Probability (2)	Easy to detect (1)	1	2	Protocol		Training Plan	
7	Study Phase	Does the Phase of the trial increase the...	Medium Impact (2)	Low Probability (1)	Difficult to detect (3)	1	6	Protocol	Not applicable	Quality Plan	
8	Study Phase	Is this a pivotal trial?	High Impact (3)	High Probability (3)	Easy to detect (1)	1	9	Protocol		Risk Management...	
9	Complexity	Does the protocol require any complex...	Low Impact (1)	Low Probability (1)	Medium to detect (2)	1	2	Protocol		Communication P...	

Figure 6: New RACT Assessment scoring.

Product Configurator using Oracle Advanced Constraint Technology (ACT) and Oracle Coherence Cache (Developer Preview)

The demands of our customers are the driving force behind our move to new technology solutions for two major areas of Siebel Product Configurator, Cache Management and Constraint Rules.

Oracle Advanced Constraint Technology (ACT) is a library of algorithms found in the field of Constraint Programming. Constraint programming is a programming paradigm

where relations between variables can be stated in the form of constraints. Constraints differ from the common primitives of other programming languages in that they do not specify a step or sequence of steps to execute but rather the properties of a solution to be found.

The Developer Preview provided in Innovation Pack 2017 provides a like-for-like replacement of constraints found in previous versions of Siebel Product Configurator (e.g., Innovation 2015 and earlier). Using a new parameter, customers are able to turn on the new ACT engine and have previously written constraints run through the ACT engine to find a valid solution.

The Siebel Server Cache (a.k.a., "Coherence") allows applications to share data by storing it in a central cache. Data shared in a central cache allows for a cumulative decrease in memory usage for the server as each Object Manager process will contain less cached data. Data will be cached once in Coherence and shared across the different Object Manager requests. Shared data is persisted, cluster-aware, and fault-tolerant. The Siebel Server Cache will be used by the Siebel Product Configurator to communicate product model and messaging data to the new constraint engine.



CONTACT US

For more information about Siebel CRM, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

CONNECT WITH US



blogs.oracle.com/siebelcrm



facebook.com/oraclecrm



twitter.com/oraclecrm



oracle.com/siebel

Hardware and Software, Engineered to Work Together

Copyright © 2017, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.



Oracle is committed to developing practices and products that help protect the environment