CA Workload Automation DE Release Comparison

Feature	Description	DE r11.3.3	DE r12	Benefit
Support for Advanced Integration for Hadoop	Advanced integration for Hadoop lets you integrate with Cloudera and Hortonworks Hadoop distributions. You can now define Hadoop jobs, like HDFS, PIG, HIVE, Sqoop, Oozie and add to workflows.		✓	App Dev and workload administration teams can automate and orchestrate jobs across hundreds of enterprise systems such as SAP, Oracle and others alongside your Hadoop jobs using a single console • A familiar interface for all job scheduling • Seamless integration with leading business apps and ERP systems • A single point of control • Critical path analysis and forecasting • Multi-platform scheduling
Support for PostgreSQL Database	CA Workload Automation DE supports the PostgreSQL database, which is packaged with the server on 64-bit Windows® and Linux® platforms only.		✓	Reduces total cost of operation (TCO) by offering PostgreSQL database support. If you are already using a PostgreSQL database, you can set up it as an external database with the server installed on any supported platform including UNIX® platforms.
Support for Hyperlinks in Comments	Allow hyperlinks and shared directory paths can be placed in event/application/job comments for improved job documentation.		✓	This support provides better communication to the operator. For example, you can write a comment such as "This job generates an important file in ftp: //test/sample" to alert an operator that this job should not be bypassed. It also eliminates the need for including more content as the user can now specify network share paths, referencing docs.
Migration Utility Enhancements	Track the progress of artifacts migration easily by configuring the migration logging levels, enable e-mail notifications and threshold for log files.		✓	These settings will improve the user's ability to determine the status of the migration process and will give more insight into any errors or issues that may occur. Administrators can also configure e-mail notifications to alert for migration completion status.
New CLI Commands	You can now delete archived versions of an application and insert Windows/UNIX jobs at run time through CLI command.		✓	The Command Line Interface (CLI) now lets you insert Windows/UNIX jobs in an active application generation. Admin users can now delete archived versions of an application through CLI command.
In-Place Upgrade	You can now use the in-place upgrade method to upgrade your server from the R11.3 to R12.0 version without any hassles of migration of data.		✓	This minimizes the downtime to as little as two hours, saves time by upgrading the server to the same directory on your computer where the server Workloads originally installed and takes less effort because you are not required to install a new instance of the server or database and migrate artifacts, global variables and history data.
Repairing the Server	You can repair the server if the jar files in the lib and migration folders are corrupted after the successful installation or in-place upgrade of the server.		✓	It's an easy process to repair the server through this new functionality if any of the files mentioned are corrupted
New and improved Security Permissions for Administrators	Administrators can enforce security on agents so that only permitted agents can be allowed to define in jobs by scheduling teams. Permissions are introduced to restrict users not to reset job definition and resubmit jobs at run time.		✓	Enable M.S.P.s to allow clients to see only those agents that are permitted to define workload. Operations team can be restricted to not to reset job definition and resubmit jobs at run time.
New Server Configuration Parameters	New server parameters introduced to configure parallel threads required for events and forecast reports generation.		✓	Workload automation administrators can now configure threads for parallel event triggering capability and forecast reports generation. This improves DE overall performance significantly.
Enhancement to Housekeeping application	Housekeeping application is now part of default application with additional jobs to delete status messages. One more utility is provided for PostgreSQL DB management.		✓	Deleting status messages improves server performance and eliminate the need for server to process these messages. The housekeeping application for PostgreSQL monitors the DB space growth and alerts the User when certain limit reached.

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Oracle Performance Optimization with Database Tuning Parameters	Oracle DB tuning configurations like introducing table partitioning and increasing CLOB chunk size, INITRANS improves overall DB performance. Indexing introduced to reporting tables.		✓	Overall Oracle DB performance has been improved with default DB tuning parameters introduced. Canned reports now runs quickly as indexing has been applied on all reporting DB tables across DE supported databases.
Eliminated ADMIN requirement to launch CA Workload Desktop Client for the first time. Ease of Desktop Client installation.	Requirement of Admin user to launch Desktop Client for the first time and while updating patches has been eliminated.		✓	Non-admin users can launch Desktop Client for the first time without requirement of admin user's first time launch. Client users can also do update site to apply Desktop Client patches now. This will improve overall installation experience when there are hundreds of client machines to manage installations/updates.
The following are 11.3 enhancements that are also in r12				
IPv6 Support -	All components of CA Workload Automation DE (server, client and agents) support Internet Protocol version 6 (IPv6) on UNIX. Unlike IPv4, that uses a 32-bit address, IPv6 uses a 128-bit address and has a huge address space.	✓	✓	Compliance
FIPS 140-2 Compliance	CA Workload Automation DE supports the U.S. Government encryption standard FIPS 140-2 and can be configured to run in a FIPS-compliant mode by enabling AES, DESEDE ciphers. Users can configure agents to comply with FIPS certified ciphers and enable SSL over JDBC connections.	✓	✓	Compliance
New Dashboard View	CA Workload Desktop Client monitor perspective contains a dashboard view provides state and historical information in a predefined status messages and monitor custom views respectively.	✓	✓	CA Workload Desktop Client monitor perspective dashboard views enables Users to monitor agent status, server status, LDAP status, license status and various other statuses like server memory status, quiesced status, etc. All these status message views allows admin user(s) to monitor health of the overall workload system.
Quiesce Capabilities	These enable you to pause the server so that no new workload can enter the server. You can start a server in a quiesce (pause) mode to prevent the server from temporarily submitting new jobs or triggering workload. When you are ready to resume submitting jobs and triggering workload, you can either unquiesce the server or unquiesce specific applications or events on the server. You can also quiesce an agent to prevent it from temporarily receiving messages from the server or from running jobs.	✓	✓	Improved quiesce capabilities give the users more control over triggering their workload. Various options in unquiesce allows users to allow running selective workload one after the other. The missed executions of the quiesced event are not triggered.
LDAP Integration for User Authentication	CA Workload Automation DE Supports Microsoft Active Directory®, Novell eDirectory, Sun One Directory LDAP servers. DE uses LDAP V2 & V3 APIs to connect to LDAP systems. Multiple LDAP servers can be configured with a condition that they are all of same vendor type. SSL-based LDAP authentication requires trust certificate of LDAP Server.	✓	✓	CA Workload Automation DE implements out of the box LDAP authentication. This will help administrators pull users from LDAP user store and configure them as CA Workload Automation DE users. LDAP Groups support feature enables customers to pull only those users who are CA Workload DE application specific users. For example, you can pull 300 users specific to CA Workload DE out of 10,000 users who belongs to an enterprise.
Agent Groups	You can create agent groups in the topology by logically grouping agents of the same operating system. This supports CPU, ROUND ROBIN and RANDOM algorithms.	✓	✓	Agent groups lets you load balance the agents configured in a logical group definition (or) user can run a job on all agents defined in that group. CPU load balancing allows jobs to run on agent(s) having less load on CPU (or) based on load factor defined.
Topology Enhancements	Admin topology view shows all the nodes related to HA servers, agents, agent groups, LDAP servers, SNMP, SMTP servers, etc., with respective status information.	✓	✓	CA Workload Desktop Client topology view allows admin users to monitor status and control the health of various nodes configured with CA Workload DE solution.

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History Table Management	As the history information in your database tables grows over time, your server performance degrades. Stage tables introduced to transfer history data when data is growing large.	✓	✓	You can now move some of your history data to stage tables to save disk space and make querying the tables faster, improving server performance. You can save the stage tables to a file or a tape as a backup or delete them as required.
Automatic Update of CA Workload Desktop Client Patches	You can now configure CA Workload Desktop Client to update client installations automatically whenever there are patch updates available. UpdateSiteURI location need to be updated with hot fixes location for automatic updates.	✓	✓	Saves time over doing this manually and will keep the client current with the latest patches. CA Workload Desktop Client now visually notify the user if there is a new update patch/hot fix available.
Support for Windows Authentication on Microsoft SQL® Server	You can now use Windows authentication instead of SQL server authentication.	✓	✓	Allows customers to configure SQL server database with CA Workload DE server in Windows authentication mode so that CA Workload DE server can use the exactly the same security scheme that applies to corporate network i.e., user names, passwords and permissions are the same for network resources and CA Workload DE.
Forecasting Enhancements	You can now schedule forecast reports using events to save the output on the server for viewing it later.	✓	✓	You can export the output in different formats including CSV and HTML. When scheduling forecast reports, you can specify a list of users to notify when the forecast report execution is complete. You can also grant permission to a list of users to view the report output.
New Server Parameters	Several new server parameters have been added to better enable you to control the behavior of the server.	✓	✓	You are enabled to configure server parameters to control the behavior of the server.
Searching for Jobs Across Applications	You can now search for jobs across applications defined on a single server.	✓	✓	Useful for locating jobs that are defined in many different applications. From the search results, you can open each job definition and make the required changes.
Load Balancing	You can use agent groups to balance workload between each agent defined in the group.	✓	✓	This allows the workload to be automatically distributed to the optimal agent
Running Jobs on all Agents in a Group	You can use agent groups to run a job on all agents in the group.	✓	✓	This enables you to create a single backup job and set it to run on multiple agents, with each agent installed on a different server. This is useful to check the operating system patch level on all systems and roll over a job to apply OS level patches on all agent systems.
Job Output variables	For selected job types, the server creates a JavaScript variable for each return value.	✓	✓	You can use the return values of a job in the subsequent jobs of that application. For example, the result of an SQL query can be stored as a variable and then passed to another job. This allows more granular control over jobs.
Support for New Agent Releases	• CA Workload Automation Agent for UNIX r11.3 • CA Workload Automation Agent for Linux r11.3 • CA Workload Automation Agent for Windows r11.3 • CA Workload Automation Agent for i5/OS r11.3 • CA Workload Automation Agent for application Services r11.3 • CA Workload Automation Agent for Web Services r11.3 • CA Workload Automation Agent for Micro Focus r11.3 • CA Workload Automation Agent for Databases r11.3 • CA Workload Automation Agent for SAP r11.3 • CA Workload Automation Agent for PeopleSoft r11.3 • CA Workload Automation Agent for Oracle E-Business Suite r11.3.1	✓	✓	Technical currency and compliance. This will enable native integration to various third-party applications.

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Variable Dependency Monitor Events	You can now trigger workload based on global variable expressions.	✓	✓	When you create a variable dependency monitor event, the server evaluates the variable expression and runs the application referenced in the event whenever the variable expression is satisfied. The server reevaluates the expression whenever any of the variables in the expression changes. This allows granular control over the workload to be run.
Event Priority	In an event definition, you can now specify an event priority from one (lowest priority) to 10 (highest priority) to prioritize the triggering of events scheduled at the same time.	✓	✓	If there are multiple events being triggered at the same time, users will now be able to control the order in which they are triggered.
Progress Bar for Running Applications	When you open the graphical view of a running application in the monitor perspective, a new progress bar shows the application's start time, estimated end time and completion percentage.	✓	✓	This gives the user feedback on the status of the job
Extend CA Workload Web Services	CA Workload automation agent for Web services has been extended to let third party solutions create, update, invoke, monitor and control workload.	✓	✓	Allows external applications additional control over CA Workload DE workload using Web services. This increases the options available to scheduling teams and widens the scope of applications that use CA Workload DE. Customer business applications can be integrated with automation easily.
Application Templates for Third-Party Integration	Application templates are ready-to-use application definitions that third-party users can run at any time by passing required parameters.	✓	✓	Application templates let you integrate CA Workload Automation DE with a third-party application. Users can focus more on their business applications rather than the underlying CA Workload Automation DE technology. For example, you can define a single application template for the payroll processes of two companies so that each company runs the application template with their own parameters.
Specifying JavaScript Scripts in the Job Definition	You can now define a JavaScript script within a job definition. The script can run at event trigger time or at job run time. You can only use locally defined scripts in the job where they are defined. If you want to share a script with another job in the application, define the script in the application properties instead.	✓	✓	Users can use JavaScript to control workload triggering and have more control over their workload.
Using Content Assist to Define JavaScript Scripts	You can now use content assist to help you define a JavaScript script in an application in the Define perspective.	✓	✓	Using content assist, you can insert built-in JavaScript variables and functions in the script by selecting them from a pop-up. You can also insert native JavaScript functions and objects. This makes it easier to define the JavaScript scripts saving time.
New JavaScript Function to Get System Property	You can use the getSystemProperty JavaScript function to retrieve the value of a system property.	✓	✓	The getSystemProperty function lets you retrieve a system property without invoking a Java™ method. Invoking a Java method carries potential security and reliability problems and this issue is thus removed now.
Making Mass Updates to Jobs Within an Application	You can now make a change to multiple jobs within an application at once.	✓	✓	This will save time for the users, as they don't have to do individual changes at each job level for common changes. For example, agent name can be changed across all Windows jobs in one single mass update.
Resource Enhancements	Resource enhancements includes: • When setting resource availability counts, you can increase or decrease the availability count of a resource by a specified amount. • When you delete a resource that is being used in a job definition, CA Workload Desktop Client lists the applications affected by the deletion. • For debugging purposes, you can display details about the resources defined on the server and the processed resource requests (orders).	✓	✓	These allow greater control over workload when resource dependencies defined across multiple jobs in CA Workload DE.

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Bypassing Future Execution of an Event	You can now bypass any future execution of an event to prevent it from triggering at its scheduled time.	✓	✓	Suppose that an event triggers at seven p.m. daily. At three p.m., you decide that the event should not run that night and next day night. To prevent the event from running future time, you bypass the future execution of the event.
New Monitor States	You can set up notifications to notify users or take action when a job reaches a certain state.	✓	✓	Notifications now support the following monitor states: ▪ Force completed ▪ Global variable wait ▪ Resource wait This will remove the need for users to be manually looking for job status changes and will save time for them.
Email Notification Templates	When setting up email notifications, you now have full control over the message content with the default e-mail template.	✓	✓	When overriding the default subject or message, you can insert application- and job-level built-in symbolic variables using a menu. Administrators can edit the default subject and message by modifying the default email template defined in the Topology. This let's admins improve communications with greater control over e-mail message content.
Job Profiling	For more accurate average data, you can specify a job profile that considers the execution-time differences of a job for various days, times, or contexts. You can specify multiple profiles based on different criteria for a job.	✓	✓	By default, the server calculates anticipated end time, due out propagation and critical path using the average execution time of the last 10 runs of the job. This is a default profile. With this feature, one can define a profile to calculate average execution time, for example create a profile for MONDAY to THURSDAY where job runs same time and it takes more time on FRIDAY.
Referential Integrity	CA Workload Desktop Client applies referential integrity over various workload artifacts. For example, one application can have multiple events associated.	✓	✓	This feature help Users when they delete one application, CA Workload Desktop Client warns the user listing associated events affected. Later user can decide to delete or not, based on this input. This applies to calendars deletion that affects events, resources/agents/agent groups deletion that affects applications.
Reason Field for Job and Application Commands	When issuing job or application level commands using the monitor perspective or the exexCommand built-in function, you can specify a reason for issuing the command. One can mandate the reason for issuing commands at the application properties level.	✓	✓	This allows workload-monitoring users to input reasons while executing action commands at application or job level for detailing the reason of action.
Default Zoom Settings for Application Graphs	You can now set default zoom settings for application graphs in the define and monitor perspectives.	✓	✓	This removes the need for users to specify a zoom setting every time and is a usability feature
Selecting User IDs in Job Definitions	Specifies the Windows user ID that runs the job. The user must be defined in the topology.	✓	✓	Most of the time, you are restricted to how you can access data on remote computers. To access restricted remote resources, you can run the job under a user ID that has access to those resources. This feature will help enforce authorized users running these jobs.
Inherit Trigger User Preference	When you create an event, you can set the inherit trigger user option to override the execution user for events triggered manually.	✓	✓	You can now set a preference for the Inherit trigger user option, which is useful if you often override the default behavior.
Job Ancestor Wait (JANCWAIT State)	When defining a job, you can specify a new option to delay the job from running until the same job completes in a previous generation of the application. The job goes to JANCWAIT state.	✓	✓	If the same job is running in a previous application generation, the server puts the job in the new application generation in a JANCWAIT state. When the job completes in the previous application generation, the server removes the JANCWAIT from the job in the new application generation and submits the job when its dependencies are met.

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Suppressing Notifications for a Job	If an application contains notifications, the notifications are copied to each job in the application. If you do not want the application-level notifications to apply to every job, you can now suppress them. Alternatively, you can edit or remove a copied notification.	✓	✓	More flexibility given to control over notifications defined at application level.
Customized Sort Order for Custom Views	When you create or update a custom view, you can now customize the sort order of the columns that appear in the view. You can override the sort order by clicking a column heading in the open custom view.	✓	✓	This Improves usability and user experience features.
Hiding Completed Jobs Automatically Using the Rounded at Option	When hiding completed applications automatically, you can now select a time interval frequency using the Rounded at option. For example, if you select every two hours using the rounded at option, completed applications are automatically hidden every two hours, starting at the top of the next hour.	✓	✓	This will help operations team to monitor only active workload and gives more flexibility in monitoring critical active workload.
Folding Groups in Job Definitions	This usability enhancement lets you expand and fold groups of job properties (sections) based on your level of experience with the product.	✓	✓	By default, job definition properties that are set in the application, such as the agent name or run frequency, are folded to minimize clutter. You can set a preference so that these sections are always expanded.
Application Integration Tags	To integrate an application with another product from CA Technologies, you can now specify application integration tags in the application definition.	✓	✓	You can map an application to one or more business services defined in CA Spectrum SA. CA Spectrum SA lets you model services to represent cross-product data based on logical business functions.
Server Restart on Lost Database Connectivity	When a database connection is lost in a standalone or CA Workload High Availability DE configuration, the server tries to reconnect to the database for an hour. If it fail to reconnect then the server goes down.	✓	✓	A database connection can be lost due to network failures, DB stopped intentionally or by mistake. This feature will give flexibility to CA Workload DE to wait for DB availability and later shutdown gracefully if DB is not recovered in configured retry timeline.
Support for Web Services Job and Remote Execution Job	Provide an ability to define web services jobs that enable third-party software integrations. Remote Execution Job provides an ability to run jobs remotely on UNIX, LINUX, OpenVMS, NON-STOP systems.	✓	✓	**Web Services Job** lets you call an operation within a web service and pass parameters to the operation using document/literal style binding. **Remote Execution Job** let's you run commands on a remote UNIX, HP Integrity NonStop and OpenVMS computer through Secure Shell (SSH2) or Telnet.
Support for Multiple Run Control Tables in PeopleSoft Job	In a PeopleSoft job, you can now specify arguments in multiple run control tables.	✓	✓	This will bring ease of PeopleSoft jobs automation as User can define multiple run parameters for a given PeopleSoft process.
Banning Users from Opening Client Sessions Temporarily	You can use the CLIENTSESSION command to ban users or groups of users from temporarily opening client sessions to the server.	✓	✓	To help you manage client connections, a new CLI command named CLIENTSESSION Workloads added.
Support for Informatica Job Type	Informatica Jobs allow the user to retrieve information about Workflows, tasks defined in Informatica including status, logs. Instead of defining and managing command scripts, users can now define jobs by simply making a few selections in an easy-to-use graphical interface—without requiring in-depth Informatica skills.	✓	✓	Informatica jobs can be effortlessly linked with jobs from other business applications enabling the creation of end-to-end processes managed and monitored from a single solution. And CA Workload Automation DE provides features not available in the Informatica scheduler, including SLA management, robust monitoring, auditing and reporting, event-driven scheduling and more.

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Support for Microsoft SQL Server Agent Job Type	Microsoft SQL Server Jobs allow the user to define, manage and control workload related to SQL Server Agent Jobs.	✓	✓	This offers the capability to define, run, monitor and control jobs for Microsoft SQL server agent business applications. Controlling SQL Server agent schedules through Workload solution optimizes time as the user does not need to spend additional time to monitor SQL agent job schedules through SQL Server scheduler
Starting the Server During Migration of History Data	With this enhancement, you can now start the server after the data from the ESP_APPL_GEN and ESP_LONGKEYS tables are migrated. The migration utility prompts you when you can start the server: "Now DEr11.3 server can be started for parallel workload processing…"	✓	✓	This enables faster upgrades/migrations across CA Workload Automation DE major releases.
SFTP Job Type Enhancements	Support ASCII file transfers along with public-key authentication to the SFTP server. You can specify an FTP user ID (user authentication), a private key file (public-key authentication), or both (multifactor authentication).	✓	✓	This enables advanced file transfer capabilities to SFTP job types. Now the file transfers are more secure with the introduction of multi-factor authentication.
Run as User Support for Both FTP and SFTP Jobs	Ability to specify the user (run as user) that runs the job on behalf of the agent user.	✓	✓	This enhancement lets FTP and SFTP jobs access remote network resources that the agent user does not have access to…
Automating Resubmission of a Failed z/OS-Regular Job From a Specific Step	You can now automate the resubmission of a failed z/OS-Regular job from a specific step. You can specify multiple step conditions.	✓	✓	This will allow users to automate z/OS jobs effectively based on z/OS job step end completion status.
Automating Resubmission of a Failed z/OS-Regular Job From a Specific Step	When a database connection is lost in a standalone or CA Workload High Availability DE configuration, the server tries to reconnect to the database for an hour. If it fail to reconnect then the server goes down.	✓	✓	Every time a z/OS job fails, it is resubmitted automatically based on the retry count and step conditions.
Support for New Time Zones	Time zone codes: Monterrey (Nuevo León, Mexico) and Santa Isabel (Baja California, Mexico).	✓	✓	CA Workload Automation DE now supports additional time zones so that DST cases can be managed effectively.
Delete Site Command Support for SFTP Jobs	You can delete files and directories after transferring files using SFTP jobs.	✓	✓	You can delete the local source files (if uploading) after they are uploaded from the agent computer or the remote source files (if downloading) after they are downloaded from the remote SFTP server.

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