

# CA AutoSys® Workload Automation r11

CA AUTOSYS® WORKLOAD AUTOMATION IS A DISTRIBUTED HOSTED WORKLOAD AUTOMATION PRODUCT THAT PROVIDES EVENT-DRIVEN AUTOMATION, POLICY-BASED MANAGEMENT, WORKFLOW MONITORING AND REPORTING CAPABILITIES.

## Overview

CA AutoSys Workload Automation (CA AutoSys WA) for distributed environments helps you meet real-time business demands efficiently, reliably and securely by dynamically responding to business events, mapping workload processes to service level agreements, ensuring continual monitoring and automating recovery.

## Benefits

CA AutoSys WA provides distributed-hosted event driven automation that aligns workload execution with business policies to:

- Increase operational efficiency
- Improve productivity
- Increase availability of critical business services
- Manage costs and lower risk

## The CA Advantage

For more than a decade, CA has designed, deployed and managed production workloads across some of the largest and most complex IT environments in the world. CA AutoSys WA combines with CA Workload Control Center (CA WCC) to elevate the CA solution — and your business — to the next level. It is part of CA's vision for Enterprise IT Management (EITM), which helps you unify and simplify IT management across the enterprise for better business results. CA AutoSys Workload Automation is the industry standard distributed workload automation platform.

---

## CA AutoSys WA Responds to Events, Monitors in Real-Time and Predicts Problems in Advance

Today's on-demand business world requires real-time information processing. Businesses now compete at least partially on their ability to manage IT processes quicker than their industry counterparts. As a result, today's workload processes require intermingling scheduled, batch-oriented workloads with real-time events. That means you need to do more than schedule or manage discrete jobs; you need to orchestrate workload as a business process in its own right, and ensure it's in sync with other critical services that keep your business running.

Reliable and timely information processing on virtually any platform is a new business imperative — it is called Workload Automation and it is a natural evolution from IT-centric job scheduling (batch reports, system backups).

CA AutoSys WA r11 represents the next generation of job scheduling and workload management systems for distributed computing environments. It has been enhanced for greater scalability, improved management and control, web services integration and business process automation.

CA AutoSys WA readily scales to enterprise demands. Workloads are intelligently and efficiently allocated based on real-time information about available computing resources and service priorities. It is fully integrated with the CA Workload Control Center for end-to-end visualization of business processes across client-server, mainframe and cross-platforms via a consolidated, web-based console.

---

## Key Capabilities

Designed for distributed environments, CA AutoSys WA supports all common operating system platforms. Virtually any networking protocol can reside on any available platform. Combine disparate jobs and processes into a cohesive workflow and then manage, visualize and optimize those flows in real time. Manage and schedule a complete business process, end-to-end, from a secure, single point of control.

**ADVANCED VISUALIZATION AND ADMINISTRATION** A key component of the CA AutoSys WA solution is the CA Workload Control Center. CA WCC provides an innovative web-based environment for CA workload automation engines, agents and application adapters. This user interface provides meaningful views of business processes across multiple platforms via a consolidated, web-based tool. Utilizing leading-edge technology, it provides administration, visualization and monitoring of multi platform job flows from a business relevance perspective.

**ROLE-BASED REAL-TIME MONITORING** Allows users to control which jobs they want to view based on various parameters, such as the current job status, the job name and the machine on which a job runs, all from a single point of control.

**BUSINESS-CENTRIC JOB FLOWS** CA AutoSys WA provides an optimized presentation for visualizing the entire enterprise as business flows. Organizations can design their job views to reflect the exact needs of their enterprise. Job Flows contain jobs relevant to a specific business function (for example, human resources, payroll and more). Through the use of Job Flows, CA AutoSys WA provides an optimized desktop for conceptually visualizing a complete business process from end-to-end. The global interface enables the user to view the schedules, events and business processes that are critical to the success of the organization. Job Flows are cross-server, cross-platform and cross-product. Mapping of jobs to business processes gives your administrators the ability to detect problems and resolve them based on their significance to the business.

**MULTI PLATFORM SCHEDULING** Manage and visualize a complete business process end-to-end across all platforms from a central point of control.

- **CA AutoSys WA supports UNIX, Windows and Linux** Client/server-based architecture supports virtually any networking protocol, and can reside on any available platform. Sophisticated agent technology extends job scheduling capabilities to remote platforms.
- **CA AutoSys WA integrates across the CA Workload Automation solution** Tightly integrated with other CA scheduling engines such as CA 7® Workload Automation (CA 7 WA).

**DYNAMIC JOB CONTROL** By combining business-driven and ad hoc events with powerful calendaring, your job schedules are flexible and responsive to the ebb and flow of business and operational events. CA AutoSys WA supports interdependent processing and complex branching logic. Related tasks may be grouped into job streams and managed and monitored as one unit of work, simplifying operations.

**FLEXIBLE JOB AUTOMATION** Provides comprehensive automation based on processing logic, downloads, predefined job dependencies, calendar events or file arrival. Job starting conditions based on a calendar event (basic time and day or custom calendars) and/or file status, including file size and file existence.

**SEAMLESS APPLICATION INTEGRATION** Implementing applications in new or existing client/server infrastructures is a significant undertaking and a substantial investment in terms of resources and capital. Integration with CA AutoSys WA allows major business applications to be managed with reliability and flexibility and to be executed in sync with work flows running in the rest of the enterprise.

**SUPPORT FOR SAP, PEOPLESOFT AND ORACLE APPLICATIONS** By using CA AutoSys WA to drive embedded Enterprise Resource Planning (ERP) schedulers and their processes, you gain compatibility and consistency across workflows and more granular integration across applications. Managing ERP associated workload from a central point also reduces operating costs and improves visibility.

**FAULT TOLERANCE AND RECOVERY** Provides absolute reliability and fault tolerance at both the job level and the system level. You can verify that job processing occurred as expected and react to problems before they impact business operations. Reliable, lights-out operations can be achieved with intelligent, automated recovery. This ensures availability of business systems by ensuring that jobs are completed accurately and on time.

**HIGH AVAILABILITY** The CA AutoSys® Workload Automation High Availability Option ensures that jobs will run on time in the event of a machine failure and that jobs will continue processing without interruption.

**AUTOMATED ERROR RECOVERY** Error recognition, logging, notification and handling are vital components of the CA AutoSys WA environment. Complete control over error handling, including full checkpoint/rollback capabilities, recording and notification are provided.

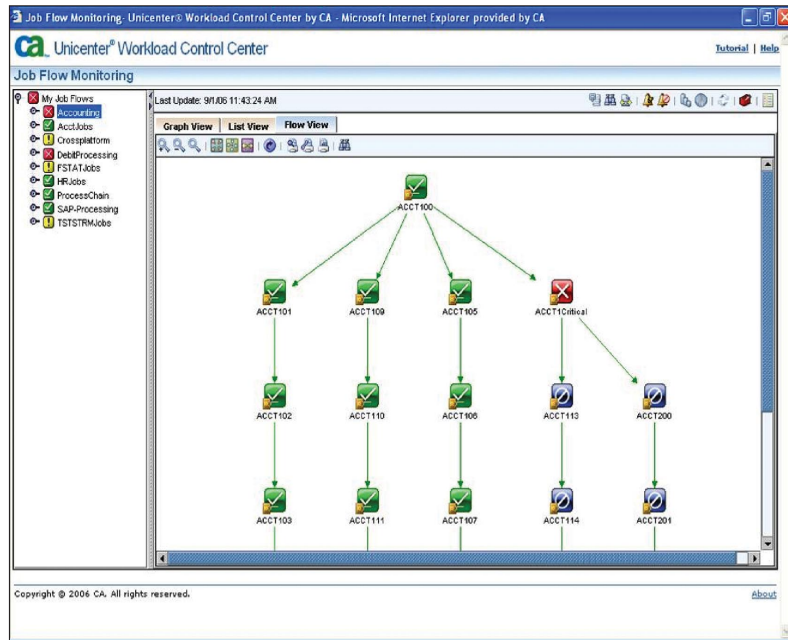
**DESIGN, MODEL, ANALYZE** CA Job Visualization provides design, modeling and analysis of your job streams along with a high-level graphical representation of the entire production environment.

**CRITICAL PATH MANAGEMENT** In conjunction with JAWS Workload Service Manager, CA AutoSys WA provides true predictive capabilities, ensuring your organization sees problems before they occur so you can meet your service level agreements (SLAs).

FIGURE A

CA Workload Control Center centralizes and simplifies administrative tasks such as maintaining job definitions, calendars and job requirements for CA AutoSys Workload Automation.

CA AUTOSYS MANAGEMENT CONSOLE — CA WCC



## CA AutoSys WA Helps Improve Service and Manage Risks and Costs

CA AutoSys WA delivers a highly scalable and flexible system for dynamically responding to real-time business needs. It helps your IT organization increase efficiency, improve productivity and reduce risk. Manual administrative tasks are dramatically reduced, along with the potential for human error.

The ability to service-enable existing jobs and processes without redesign or recoding dramatically reduces development times and improves visibility and control. CA AutoSys WA also helps you leverage application investments by providing seamless, out-of-the-box integration with ERP applications using certified adapters. This enhances workload automation within these application environments and integrates application workload with requirements outside the application, supporting your ability to fully automate your business and IT processes.

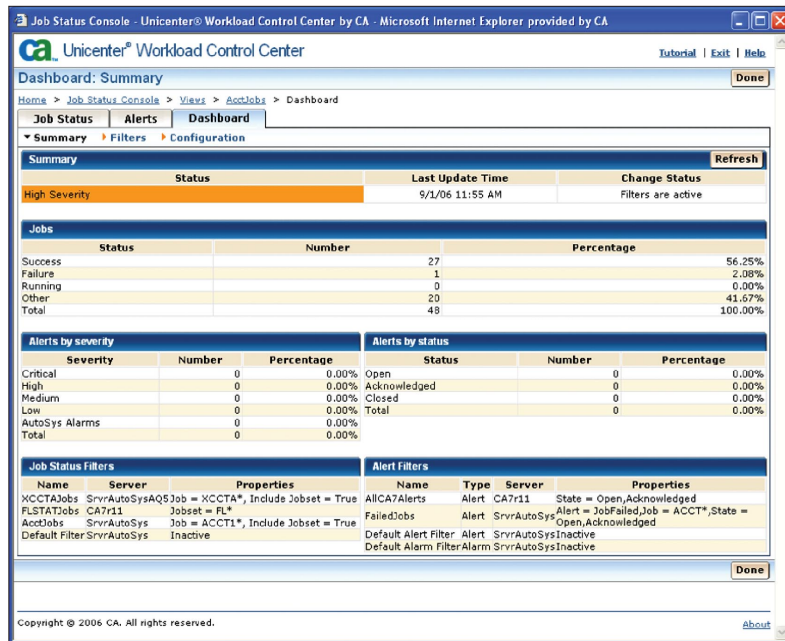
Automation reduces operating costs, contributes to greater reliability and a shorter mean time to recovery. Business-centric visualization into dependencies (schedules, events, policies and files) related to execution of the processes further improves reliability and recoverability. Workload execution is based on optimization of available resources, which contributes to better adherence to SLAs. Also, CA AutoSys WA automatically verifies that workload processing is occurring as expected, responds to problems and sends notifications before those problems can impact business operations.

CA AutoSys WA is part of the CA Workload Automation solution, which contributes to an organization's ability to optimize the performance, reliability and efficiency of enterprise IT management. It helps IT and the business to align services with business needs, thereby improving service and better managing risk and costs.

FIGURE B

Dashboard alerts based on defined policies provide a visual cue about potential problems with a business process.

MANAGEMENT BY EXCEPTION — ALERTING AND NOTIFICATION



---

## What's New in CA AutoSys WA r11

CA AutoSys WA r11 represents a significant step forward in scalability, manageability and resource optimization. CA continues to invest heavily in research and development and shorten product release cycles. This provides our clients assurance that their Workload Automation platform will support their future IT investments, reduce their operating costs and provide opportunities to automate manual procedures. CA AutoSys WA r11 and the following planned releases will extend the capabilities of the solution as a common infrastructure utility that can be leveraged throughout IT organizations into areas such as: applications development and integration, performance management and database automation. The following section outlines the new features and capabilities offered in CA AutoSys WA r11.

**CA WORKLOAD CONTROL CENTER** CA WCC is a powerful management console that provides users in your enterprise with information at both a summary and detail level. The applets in CA WCC provide graphical summaries of key status information related to a particular functional area (job/job stream monitoring, scheduling or system administration). These applets are available to users based on their roles in the enterprise and their associated access rights. From the summary information, users can launch the features of CA WCC in context to get detailed information that will enable them to analyze warnings and failure points, and take appropriate action to correct any problems. With CA WCC, your enterprise will have all the information required to efficiently and effectively manage the workload automation function.

**QUICK START** This applet displays links to the CA WCC features to which the current user has access. Depending upon your access level, the Quick Start applet may display the following features:

- Configuration
- Job Editor
- Event Console
- Host Access
- Job Flow Design
- Job Flow Monitoring
- Job Flow Overview
- Job Status Console
- Identity and Access Management
- Reporting

**JOB STATUS CONSOLE** This applet provides a real-time, consolidated view of job status and alert information for the enterprise. The Job Status Console provides three tabs: Job Status, Alerts and Dashboard. Advantages of the Console include ease-of-use, compatibility with Java and non-Java browser platforms, and improved performance.

**JOB STATUS TAB** You can see the status of the jobs for the selected workload automation server or view. From the list of jobs, you can select a job and view its details. The details show the specific properties for each job. From this point, you can manage the job. For example, you can start, stop or suspend the job, depending on the job manager's capabilities.

**ALERTS TAB** In the Job Status Console, you can define alert policies for your enterprise. When the policies are deployed, you can click the Alerts tab to display all alerts generated that match the criteria defined in your policies. You can acknowledge or close alerts and CA AutoSys WA alarms from this view.

**DASHBOARD TAB** You can see the statistical summary of job status and alerts for the current server or view. In addition, you can set the policies to define the severity level of the Dashboard. Based on this configured level of severity, the Dashboard can display a visual cue to alert you to a potential problem.

**QUICKVIEW** Displays a list of CA AutoSys WA jobs for a specific server, and updates to display additional information (associated events, job details, job dependencies, and so on) about a selected job. This display is similar to the previous motif Job Activity Console.

**COMMAND LINE DIALOG** Lets the user execute a CLI command on CA AutoSys WA or CA 7 WA servers.

**INTEGRATED WORK FLOW** Integrated work flow to define, execute, monitor and administer workload automation and IT processes. Work flows engage human interactions via role-based task lists assigned to users or groups, all presented in a web-based user interface.

**SUPPORT FOR CA AUTOSYS SAPJOB, INFOPACKAGES, AND PROCESS CHAIN JOBS** This feature provides CA WCC support for creating, editing, and deleting the following CA AutoSys WA jobs:

- SAP jobs
- SAP InfoPackages
- SAP Process Chains

CA WCC also provides monitoring for these CA AutoSys WA jobs using both Job Flow Monitoring and the Job Status Console.

**BUSINESS PROCESS AUTOMATION** Business processes can easily drive CA AutoSys WA by integrating with the new Software Developer's Kit (SDK). The SDK exposes core functionality via APIs available in C++, JAVA and as a Web Service. CA AutoSys WA can be controlled by a Web Service or initiate Web Services through a new CA AutoSys WA job type.

**DYNAMIC WORKLOAD PLACEMENT AND BALANCING** Integration with the CA Management Database (CA MDB) allows job flows to be balanced effectively across available resources. CA AutoSys WA can respond to "fluid" environments where resources change dynamically. By defining jobs to run on a class of machine and interrogating the CA MDB, CA AutoSys WA virtual machines will dynamically change based on machine characteristics. At the time that the workload needs to be placed, the eligible machines will be probed to see which one is best suited to take on work at that moment in time, providing effective balancing of the workload across the pool of machines.

**INCREASED PERFORMANCE AND SCALABILITY** The architecture of CA AutoSys WA has been refactored to greatly increase throughput compared to previous versions. The updated architecture lends itself to easier instance deployment and the cost of ownership has been reduced by removing the need for a database client on every CA AutoSys® Workload Automation Remote Agent machine.

**ASSET-LEVEL SECURITY AND ROLE-BASED ADMINISTRATION** Using CA's Identity and Access Management as an embedded security engine, administrators can create specific roles for workload automation users, such as granting specific privileges to certain types of jobs, e.g. all jobs starting with the characters "PAY\*." Assets include CA AutoSys WA jobs, calendars, machines, global variables and individual send-event functionality.

**MACHINE STATUS — OFFLINE AND ONLINE** CA AutoSys WA machines can be proactively or manually taken offline to prevent the Event Processor from submitting jobs to unavailable machines. Jobs will enter a "PEND\_MACHINE" status until the machine is available to receive work. Machines that are scheduled for maintenance or unreachable machines will be set to a "MACHINE\_OFFLINE" status.

**NEW APPLICATION AND GROUP JOB ATTRIBUTES** New job attributes have been added as an organizational method of administering jobs. Each job can have an Application id or Group id or both. CA AutoSys WA utilities like sendevent, autorep and job\_depends will select jobs based on their associated Application and Group ids to help reduce the number of commands.

---

## The CA Advantage

CA AutoSys WA for distributed systems is part of a comprehensive multi platform Workload Automation solution from CA. The solution brings a central point of control and visibility to assure efficient, reliable and secure business process management. Supporting business workload design and processing across platforms and operating systems, CA AutoSys WA helps you to align enterprise IT resources to improve service and manage risks and costs.

Further, to optimize the performance, reliability and efficiency of your overall IT environment, you need to tightly integrate the control and management of distinct functions such as operations, storage, and life cycle and service management along with IT security and identity and access management capabilities.

CA's vision for enabling this higher level of management control is EITM — a dynamic, secure approach that integrates and automates the management of information technology applications, databases, networks, security, storage and systems across departments and disciplines to maximize the full potential of each. CA's comprehensive portfolio of modular IT management solutions helps the enterprise unify, simplify and secure IT to better manage risk, costs and service, and ensure that IT meets the business needs of the enterprise.

CA is the global market leader in Workload Automation and Job Management as identified by industry analysts and market share data.

**WEB SERVICES** CA WCC exposes a friendly user interface tailored towards the administration and monitoring of Web Service Jobs. This new job type can be comprised of one or more method calls to a Web Service. Web Service jobs can take advantage of the existing CA AutoSys WA scheduling, calendar, and triggering capabilities and cross-platform scheduling capabilities. A Web Service method can be passed to CA AutoSys WA to control and monitor job flows.

**JIL SYNTAX CHECKER** The JIL Syntax Checker allows preprocessing of JIL to identify syntax errors prior to committing the job definitions to the database.

**GRANULAR JOB DEPENDENCIES** An existing CA 7 Workload Automation feature known as “look-back” has been implemented in CA AutoSys WA. The feature allows a job dependency to look-back to determine if the predecessor has completed the job within a user-defined timeframe. This feature removes the necessity of resetting a jobs status to “inactive” after it has completed successfully. Also, CA AutoSys WA dependency clauses no longer have a size limitation.

**EXTENDED CALENDAR SUPPORT** Job Definitions can use an optional extended calendar that specifies the holidays, workday and cycle periods. Calendar cycles support accounting and manufacturing calendars like 4-4-5 week periods. The extended calendars will allow dynamic conditions such as “first work day of the month” or the “15th day in cycle 1 or 28th day in cycle 2.”

**REPORTING ENHANCEMENTS** CA WCC provides a highly graphical reporting and charting presentation tool to present management and performance data in real time. Selected CA AutoSys WA statistics will be gathered once every hour by querying various CA AutoSys WA tables. Data will exist for daily, weekly and monthly statistics.

**CA SERVICE DESK INTEGRATION** Integration with CA Service Desk will allow CA AutoSys WA to automatically open a service desk request when a job ends in a failed state.

**SOFTWARE HIGH AVAILABILITY IMPROVEMENTS** Integration with CA Unicenter® Network and Systems Management High Availability Service allows CA AutoSys WA to install in a clustered environment to take advantage of third party clustering services. The native CA AutoSys WA High Availability Option no longer requires a CA AutoSys WA Remote Agent for High Availability detection.

---

## Next Steps

CA AutoSys WA for distributed environments streamlines work flows to dramatically improve the automation and monitoring of business processes across the enterprise. The newest CA AutoSys WA product release represents a very significant step forward for both current customers and new users. The “industry standard” for Distributed Workload Management just got a whole lot better.

---

To learn more, and see how CA software solutions enable other organizations to unify and simplify IT management for better business results, visit [ca.com/customers](http://ca.com/customers).