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CA Workload Automation

Joe Simmons
VP, Workload Automation

September, 2014
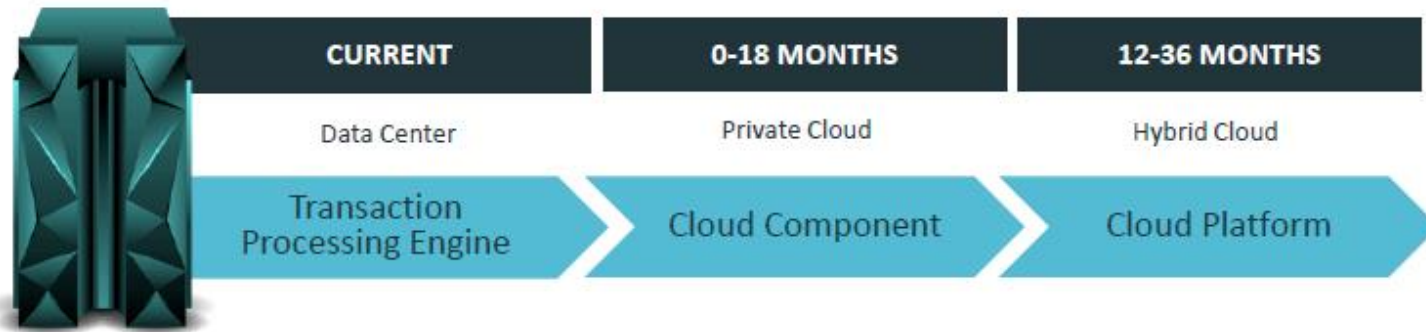
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The Dynamic Data Center

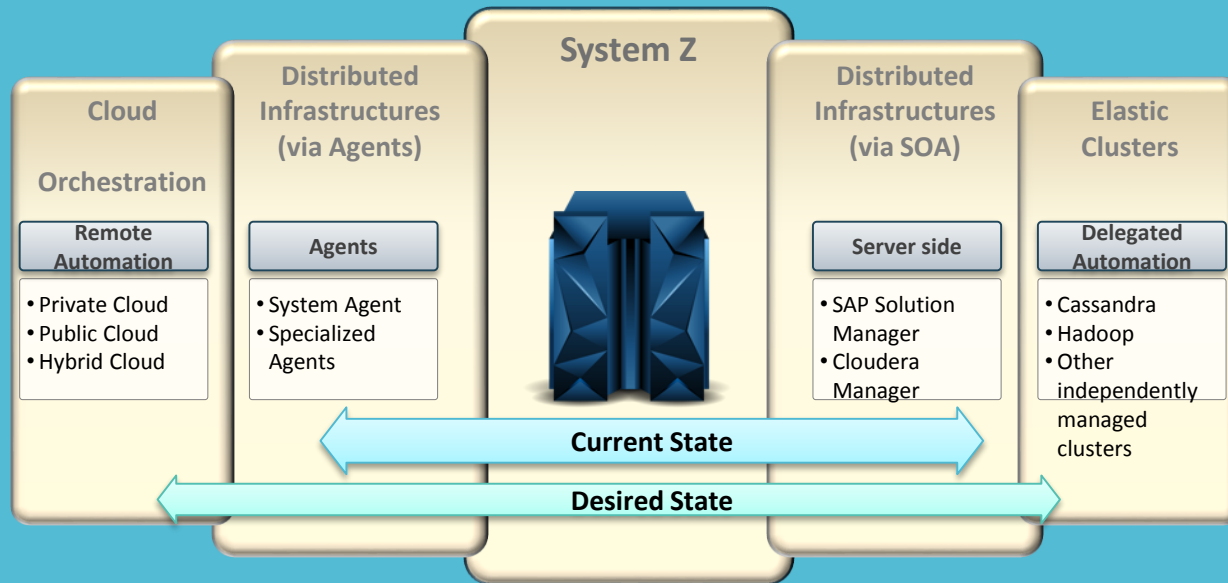|	
Business Responsiveness	Dynamic expansion/contraction
Transaction Growth	Infinite Scalability
Cost Optimization	Spans across platforms
Emerging Opportunities	Rapidly adapts

System z

CURRENT	0-18 MONTHS	12-36 MONTHS
Data Center	Private Cloud	Hybrid Cloud
Transaction Processing Engine	Cloud Component	Cloud Platform

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Workload Automation for the Dynamic Data Center

Cloud Orchestration	Distributed Infrastructures (via Agents)	System Z	Distributed Infrastructures (via SOA)	Elastic Clusters
Remote Automation	**Agents**		**Server side**	**Delegated Automation**
• Private Cloud • Public Cloud • Hybrid Cloud	• System Agent • Specialized Agents		• SAP Solution Manager • Cloudera Manager	• Cassandra • Hadoop • Other independently managed clusters

Current State

Desired State

Visibility & Monitoring + *Advanced Analytics* + *Optimized Placement & Control*

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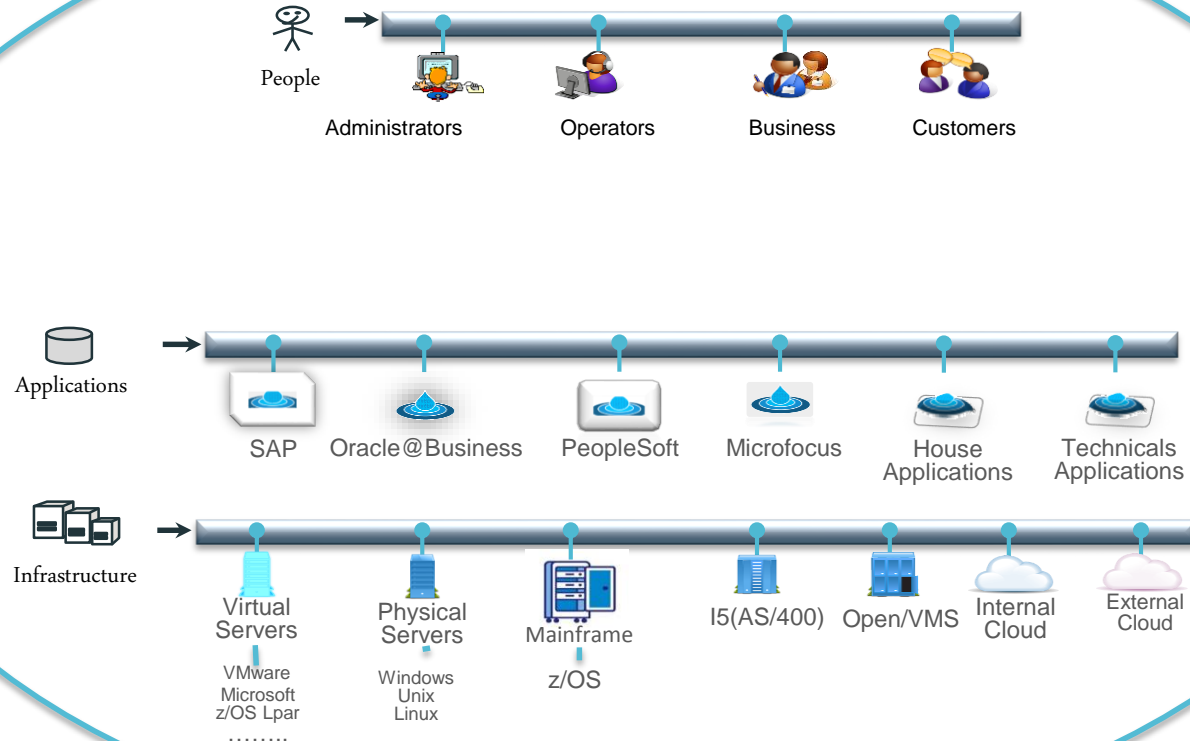
CA Workload Automation – Current Capabilities

CA Workload Automation allows your enterprise to schedule, automate and control applications, services and devices optimally and securely

- **Automate** : *sh, ksh , bat, exe, cmd, SAP , JCL, Hadoop etc.*

- **Schedule :** *Date, Calendar, Rule, Event, etc.*

- **Optimize :** *Flow, Condition, Resources , etc.*

- **Batch Security** : *Prediction, Delay, Analysis , etc.*

- **Control** : *Admin, View, SLAs , Reporting, Alerts, Policy, etc.*

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Workload Automation for the Application Economy

IT Landscape

People

Administrators Operators Business Customers

Applications

SAP Oracle@Business PeopleSoft Microfocus House Applications Technicals Applications

Infrastructure

Virtual Servers Physical Servers Mainframe I5(AS/400) Open/VMS Internal Cloud External Cloud

VMware Microsoft z/OS Lpar ....

Windows Unix Linux

z/OS

Centralized Vs. Distributed

Batch Vs. Continuous

Planned Vs. Predictive

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CA's Workload Automation Strategy
Anchoring the Application Economy

Workload Growth

New Workloads

SLA Management

New Business Models

Scalability, Portability & Performance

Drivers:
Customer Workloads growing ~ 15-25%
Decentralization
Ad-Hoc Workloads

Investments:
High Availability
Performance Enhancements
Common User Experience
Unified SLA Management

Significant Growth in emerging workloads

Drivers:
ERP Workloads
Big Data Workloads
Cloud/SAAS Workloads

Investments:
Advanced Integrations for SAP, Oracle
Advanced Integrations for Hadoop, NOSQL, BI
Agent Free Integrations for Cloud, SAAS services

SLA Management & Predictive Analytics

Drivers:
Short or Zero downtimes
Unpredictable burst loads

Investments:
Powerful predictive Analytics
Business Area and Job level SLA Management
Simulations, Impacts

SAAS, MSP Ready, Land & Expand, Open Source

Drivers:
Offer Workload Automation as a service
Allow MSPs to reach a much broader client base

Investments:
SAAS Enablement
Multi tenancy
Operator Model, certification
Embedded scheduling

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Product Roadmaps

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CA Workload Automation AE Roadmap

	Existing	Planned	Futures
Product Releases	**CA WA AE 11.3.6 Incremental 1**	**CA WA AE 11.3.6 SP1 CA WCC 11.4**	**CA WA AE 12.0**
MARQUEE FEATURES	• External authentication	• Upgrade 3rd party components • Enable core files UNIX/Linux • Identify QUE-WAIT reasons • Agent health monitoring • Automated log file management • Add detail to SNMP traps • Extend email job notification details • Aggregate statistics by default • Support Hadoop, SQL Server Agent, Informatica, SAP BI/PI agent types. • Improved supportability	• Agent heartbeat • Native 64-bit support • I5/OS subsystem support • Virtual resources box support • DB query failure alarm • Must start/complete without date conditions

CA Workload Automation CA 7 Roadmap

	Existing	Planned	Futures
Product Releases	CA 7 r11.3	CA 7 r12.0	CA 7 r12+

MARQUEE FEATURES	• Workload Automation Agent
	• Chorus Software Manager
	• Job Flow Monitor
	• CA 7 Web Client
	• Time-zone normalization
	• TCP/IP Terminal Support
		• Relational Database (DATACOM)
		  • Backup While Open
		  • Journaling
		  • Forward and Backward recovery
		  • SQL'able data
		  • Cross-system sharing
		
		• zIIP processor Support
		• Long Job name Support
		• Task re-architecture
		
		GA as of Sept 5th, 2014
			• High Availability
			• SYSPLEX Awareness
			  • Extended architecture
			  • Multiple CP Support
			• Active-Active

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CA Workload Automation ESP Edition Roadmap

	Existing	Planned	Futures
Product Releases	CA WS ESP 11.4 SP1	CA WA ESP 11.4+	CA WA ESP r11.4+

MARQUEE FEATURES	• High Availability
	    • SYSPLEX-to-SYSPLEX Failover
	    • Resource File integrity and recovery
	• New Agent Support
	    • Informatica
	    • Microsoft SQL Server
	• User Experience
	    • New properties for agent definition
		• New agent support
		    • Support for Hadoop Advanced Integration
		    • Improved agent properties display
		    • Dynamic agent configuration
		• Improved usability
		    • Improved ease of use in triggering sub-applications
		    • Improved reporting ability to forecast and obtain job status
		    • Improved availability of information on ad-hoc agent inserted jobs
		    • View job commands log – audit of changes/command to a job while on scoreboard
		    • Improved Workstation GUI
		• Restful Web services support to ESP WS Server
		• Support for AES256 Support/ FIPS compliant Encryption
		• Support native USS file trigger (mf file trigger)
			• New Web UI improved interface
			• iDash integration
			• Product Currency: Common Web Services, SAP Solution Manager Integration
			• Integrations: Facilitate integration with external applications such as Process Automation, Service Desk, CA View

CA Workload Automation DE (dSeries) Roadmap

	Existing	Planned	Futures
Product Releases	**CA WA DE 11.3 SP2**	**CA WA DE 11.4 & Service Packs**	**CA WA DE R12**

MARQUEE FEATURES	• New Agent Job Types
	   – MS SQL Server Agent
	   – Informatica
	• JRE 7 Support
	• AD LDS Support
	• Install AnyWhere 2012 SP1 support, Windows 2012 and Windows 8 Support
	• Includes latest System Agent release R11.3 SP2
		• Improved Product Performance through Architectural Changes
		• Multi-Site High Availability
		• Application and Job Definition Improvements
		• Improved user interface and stability
		• Job Type Monitoring Improvements
			• Support for the following:
			   – Hadoop Advanced Integration
			   – SAP agent improvements
			   – Cognos Agent
			   – Teradata Agent
			• Improved Installer, upgrades and migration enhancements
			• Application & Job Definition Improvement
			• Job Type Monitoring Improvements
			• Reporting Improvements (TBD)
			• Agent / Advanced Integration Support (TBD)

CA Workload Automation iDash Roadmap

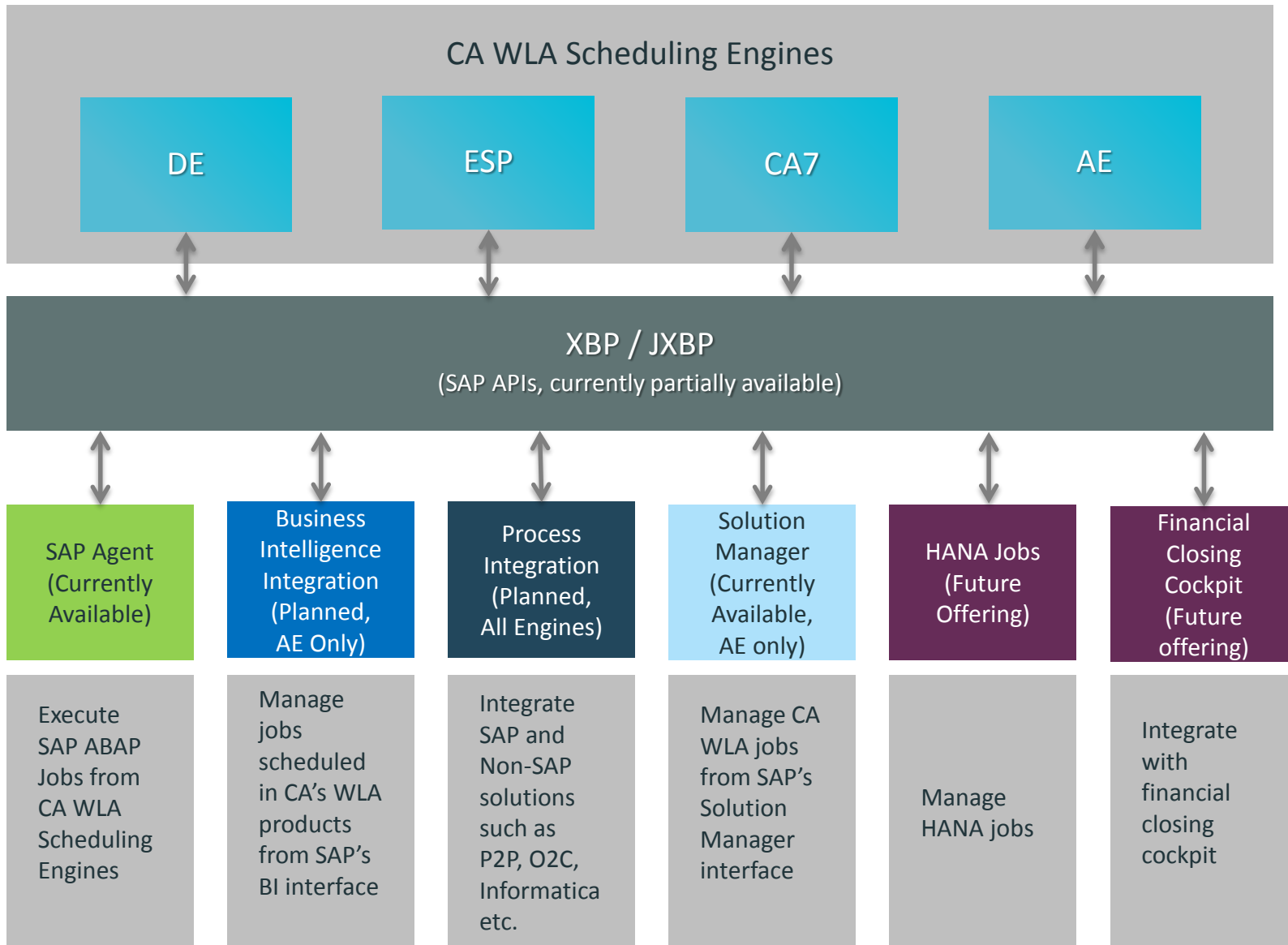|	Existing	Planned	Futures
Product Releases	CA WA iDash 11.3.6	CA WA iDash 11.4 CA WA iDash 12.0	CA WA iDash 12.x
MARQUEE FEATURES	• Integration with CA Workload Automation CA7 r11.3 • Support CA Workload Automation AutoSys 11.3.6 • Support user authentication based on CA7 credentials	**CA WA iDash 11.4** • Support EEM-based authentication and authorization • Bundle Tomcat and JRE for easy deployment • Minor GUI enhancements for ease of use. **CA WA iDash 12.0** • Rich browser-based UI • Intuitive business-group based SLA monitoring and management • Monitor SLAs from any device	• **Analytics:** Enhanced workload and SLA trend analysis and reporting • **SLA Management:** Automated SLA creation with support for dynamic workloads • **Cross-Enterprise:** Critical path analysis and monitoring of cross-enterprise job flows from a single window • **Simulation:** Perform "what-if" scenarios and impact analysis on SLAs. • **Integration:** Integrate with ESP/d and ESP/z

CA Workload Automation iDash
Differentiating factors

- **Real-time Forecasting:** iDash provides a real-time forecast of the entire CA AE and CA 7 environments. Job run durations are calculated at a highly granular level and are based on historical analytics and current information.

- **Multiple SLA Thresholds:** You can assign multiple SLA Deadlines across different periods of time to any part of your job flows. You can specify risk thresholds and start, end deadlines to represent your various business milestones.

- **Extensive Reporting:** You can generate customized HTML, PDF, CSV, XLS reports on variety of information, including historical and predictive analytics, workload and SLA performance trends and predictions.

- **Automated Alerting and Recovery:** iDash pro-actively generates alerts when various SLA thresholds are at risk or breached. The alerts can be automatically propagated to centralized notification solutions. Customized actions can be triggered to resolve issues quickly.

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CA WLA Advanced Integration with SAP

	Existing	Planned	Futures
Product Releases	SAP Agent certified on System Agent 11.3.3	**CA WLA-SAP Advanced Integration Suite**	
MARQUEE FEATURES	— Execute SAP programs (ABAPs), monitor ABAP status, and cancel ABAP execution — Delete SAP Jobs, List SAP jobs, ABAPs, variants, job count, and printers — List and set SAP parameters **SAP Solution Manager Integration with AE (Autosys)** — Extend Scheduling capabilities of Solution Manager — Administer AE jobs from within Solution Manager — Provide a central location to document jobs, within Solution Manager	**SAP PI Integration** — Get channel status — Start and Stop Channel **SAP BI Integration** — Manage Business Intelligence workload	**Enhanced SAP Agent** — Provide advanced features for the SAP agent **XBP 3.0 functionality** — Consuming raised events — Monitoring performance **JXBP interface implementation** — Allow job definition, job control etc. **Integration with Financial Closing cockpit** **Integration with HANA**

CA WLA-SAP Advanced Integration Suite Roadmap

CA WLA Scheduling Engines

DE	ESP	CA7	AE

XBP / JXBP
(SAP APIs, currently partially available)

SAP Agent (Currently Available)	Business Intelligence Integration (Planned, AE Only)	Process Integration (Planned, All Engines)	Solution Manager (Currently Available, AE only)	HANA Jobs (Future Offering)	Financial Closing Cockpit (Future offering)
Execute SAP ABAP Jobs from CA WLA Scheduling Engines	Manage jobs scheduled in CA's WLA products from SAP's BI interface	Integrate SAP and Non-SAP solutions such as P2P, O2C, Informatica etc.	Manage CA WLA jobs from SAP's Solution Manager interface	Manage HANA jobs	Integrate with financial closing cockpit

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CA WLA Big Data Advanced Integration

Product Releases		Planned	Futures
		CA WLA Big Data Advanced Integration	
MARQUEE FEATURES		**Hadoop Advanced Integration** — Support for Cloudera and HortonWorks distributions — Initial Support for the following Job Types • HDFS • MapReduce • Pig • Oozie	— Provide additional Job Types for Hadoop such as Hive and Sqoop — Integrate with NOSQL databases such as: • Cassandra • MongoDB • Oracle NoSQL — Integrate with in-memory databases such as SAP HANA

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CA Workload Automation Mobility
Information Appliances

Handheld devices offer access to information, communications, and computing power associated with traditional desktops

- Increased productivity and collaboration

- Personal navigation

- Entertainment portal

- Social media

- Financial transactions

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Dashboard - CA7SYS02

Job Queue Counts

Queues	Jobs
Request	588
Ready	212
Active	70

Job Completions

Week | **Month** | Year

- Normal
- Abnormal

Time (Mar 1 – Mar 1), Jobs axis 0–477

Job Failures

Today | Week | **Month** | Year

- Code Error (740)
- Abend (815)
- JCL Error (710)

Server Information

CA 7 Release	11.3
SMFID	SMFS
VTAM Applid	VTAMAPP
CA 7 Instance	CA7SYS01
SVC Number	122
CCI Sysid	SYSENF
CCI terminal Suffix	SYS
ARM Status 1	Disabled
ARM Status 2	---------

Workload Information

Today | Week | **Month** | Year

Number of jobs scheduled via Schedule Scan	3912
Number of jobs scheduled via Triggers	3966
Number of jobs scheduled via Adhoc Requests	12549
Number of jobs scheduled via Demand	4304
Number of jobs scheduled via Run	3949
Number of jobs scheduled via Load	4296
Number of Normal job completions	4118
Number of Abnormal job completions	2265
Number of JCL Error job completions	710

Dashboard | Monitor

Question and Answer

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