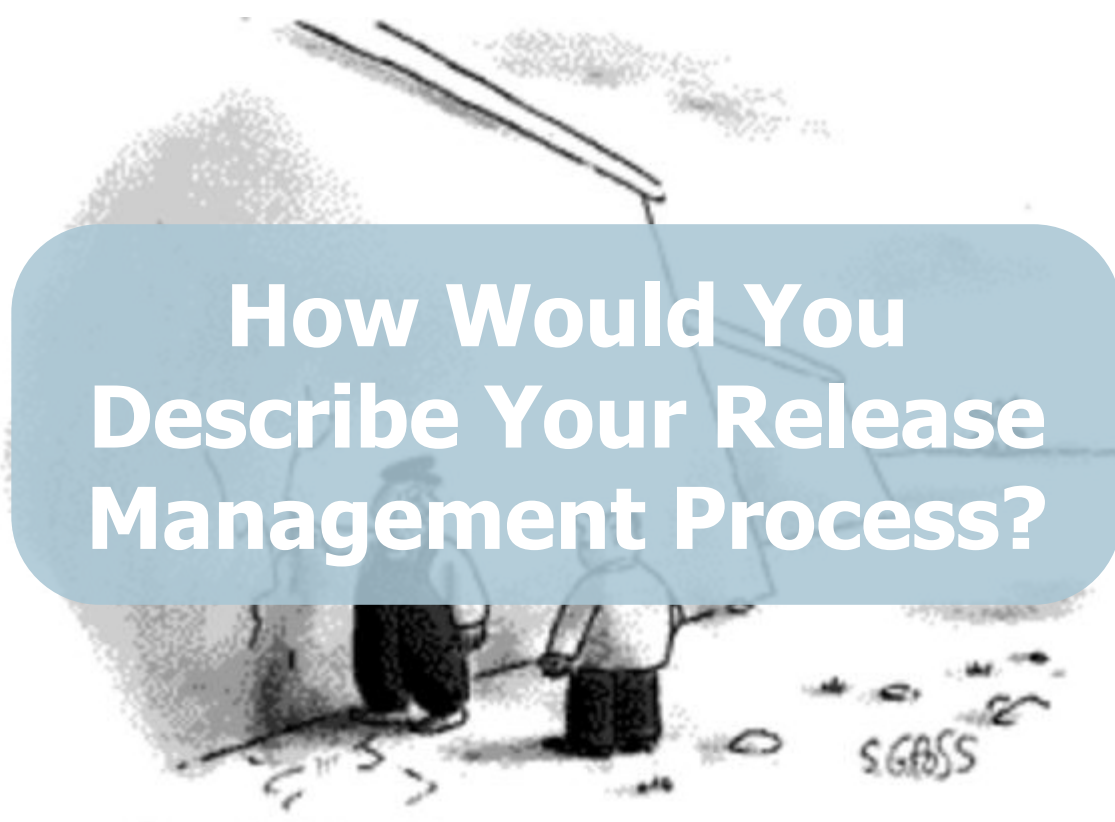




Serena Release Management

Overview

Mark Levy, Product Manager – Serena Software



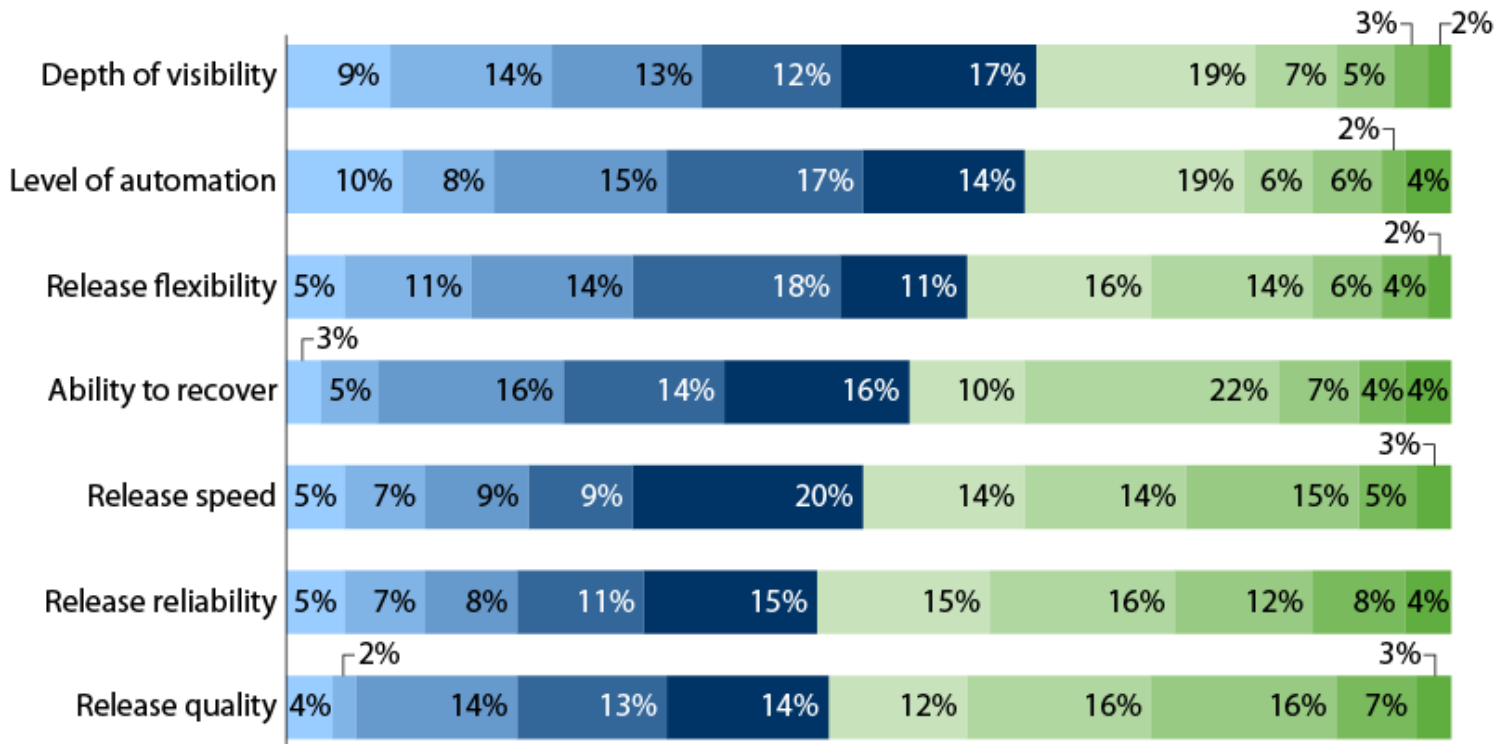
How Would You Describe Your Release Management Process?

"Instead of doing development, I've been staying up all night making sure the release gets installed"

Release Management Satisfaction Is Low

"How satisfied are you with the following aspects of your release management process?"

1 — completely dissatisfied 2 3 4 5 6 7 8 9 10 — completely satisfied



Base: 101 IT professionals involved in or aware of their company's release management processes (percentages may not total 100 because of rounding)

Source: Q4 2010 Global Release Management Online Survey

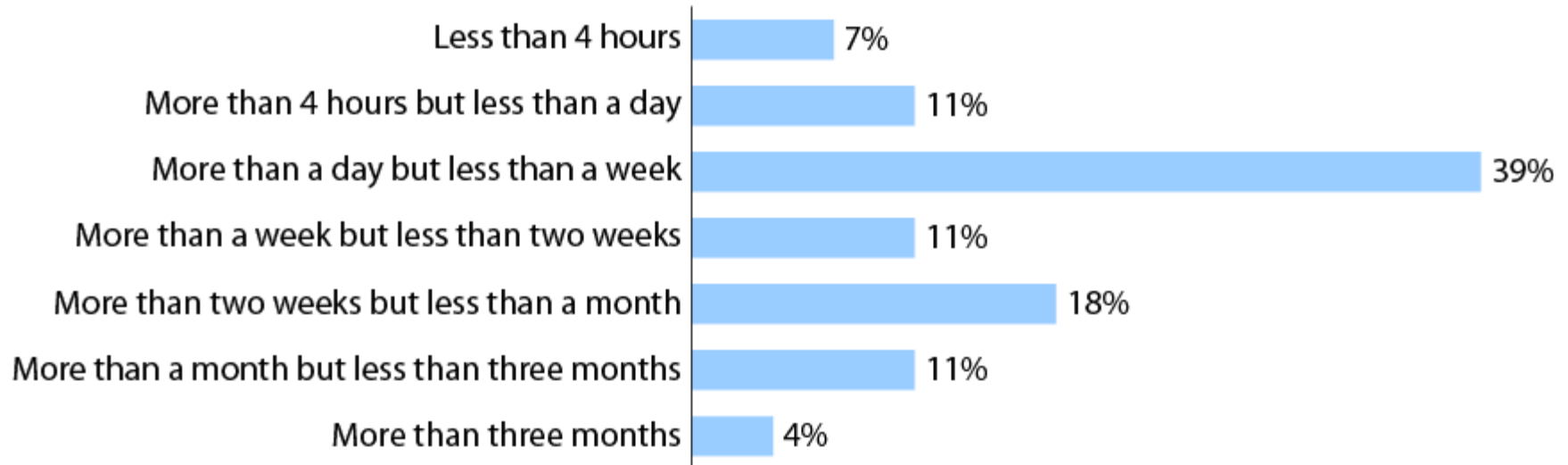
What's your "Null Release" cycle time?

What is the "Null Release" ?

"If we changed one line of code in our application (or system), how long would it take us to deploy it into production using our regular release process?"

How Long Does It Take To Release?

“If you were to change one line of code on your project, how long would it typically take your organization to push the resulting change into production?”



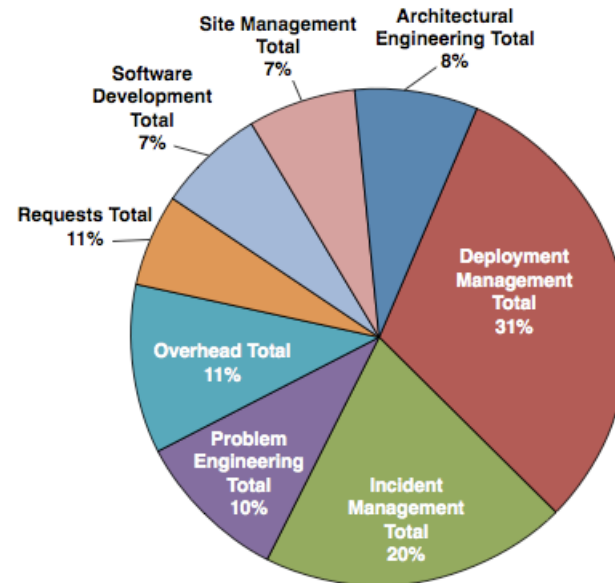
Base: 101 IT professionals involved in or aware of their company's release management processes
(percentages do not total 100 because of rounding)

Source: Q4 2010 Global Release Management Online Survey

Negative impact on business...

60%

60% of all application failures are release and configuration related.
(IDC Survey 2009)



Data Source: Deepak Patil, Microsoft Global Foundation Services via James Hamilton (Amazon Web Services)
http://mvdirona.com/jrh/TalksAndPapers/JamesHamilton_POA20090226.pdf

Over 75% of operation teams' time is spent on managing applications.
(Forrester, 2009)

Path to Production or Obstacle Course?

- High Velocity of Change
- Across many teams
- That use different processes
- And different toolsets
- Results in poor production availability
- At a high cost of service delivery



"Current release management practices and tools produce inconsistent results"

The challenges our customers tell us they're facing

"Deployment problems impacts production availability"

"My business customers don't have visibility into the release, expectations are hard to set"

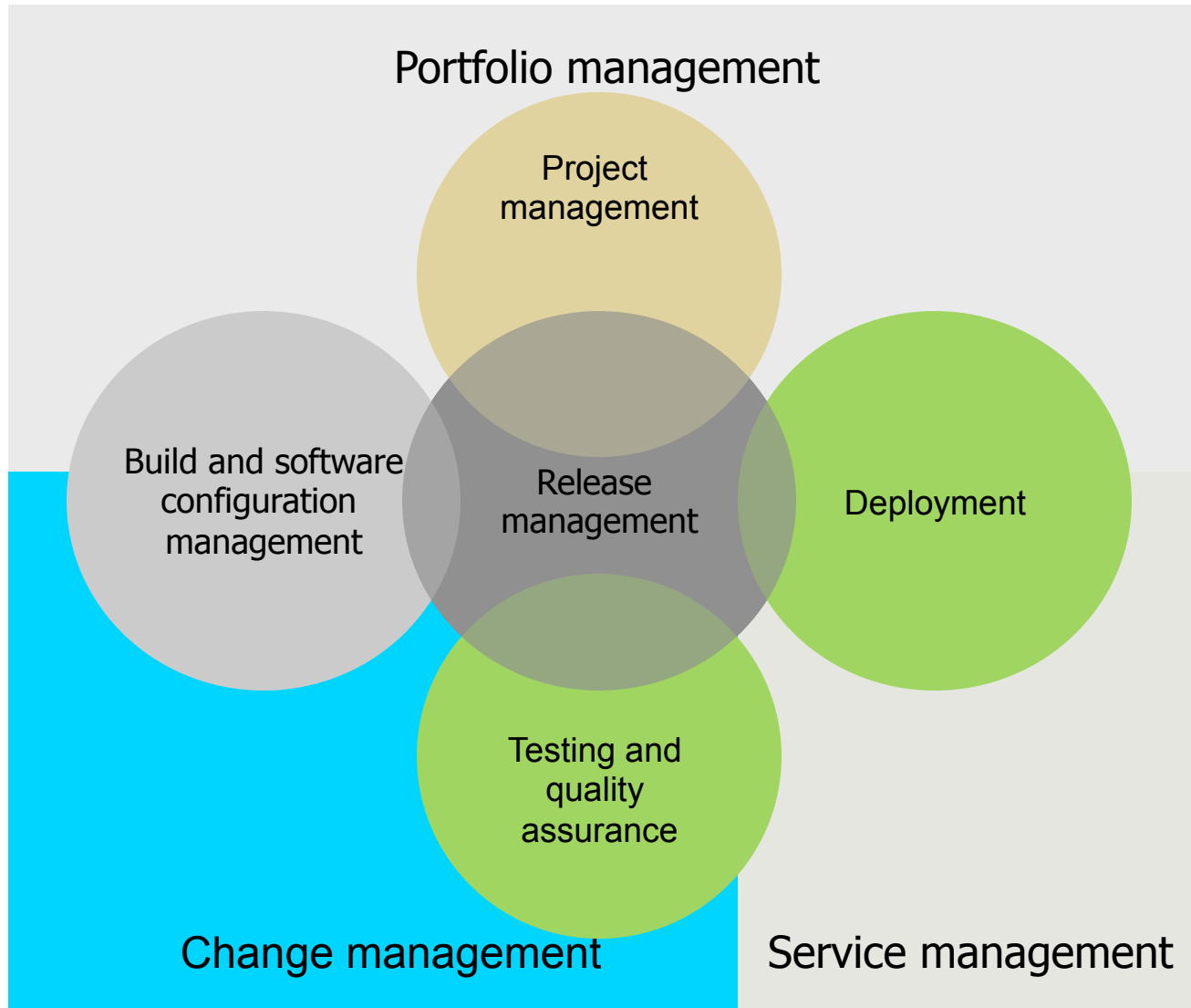
"Cost of application delivery is high and quality low"

"My IT operations group continues to struggle with release deployment into production"

"We are unable to successfully handle the increase in the number of changes we have to implement into production"

"Providing support for audit and compliance is an extremely difficult task"

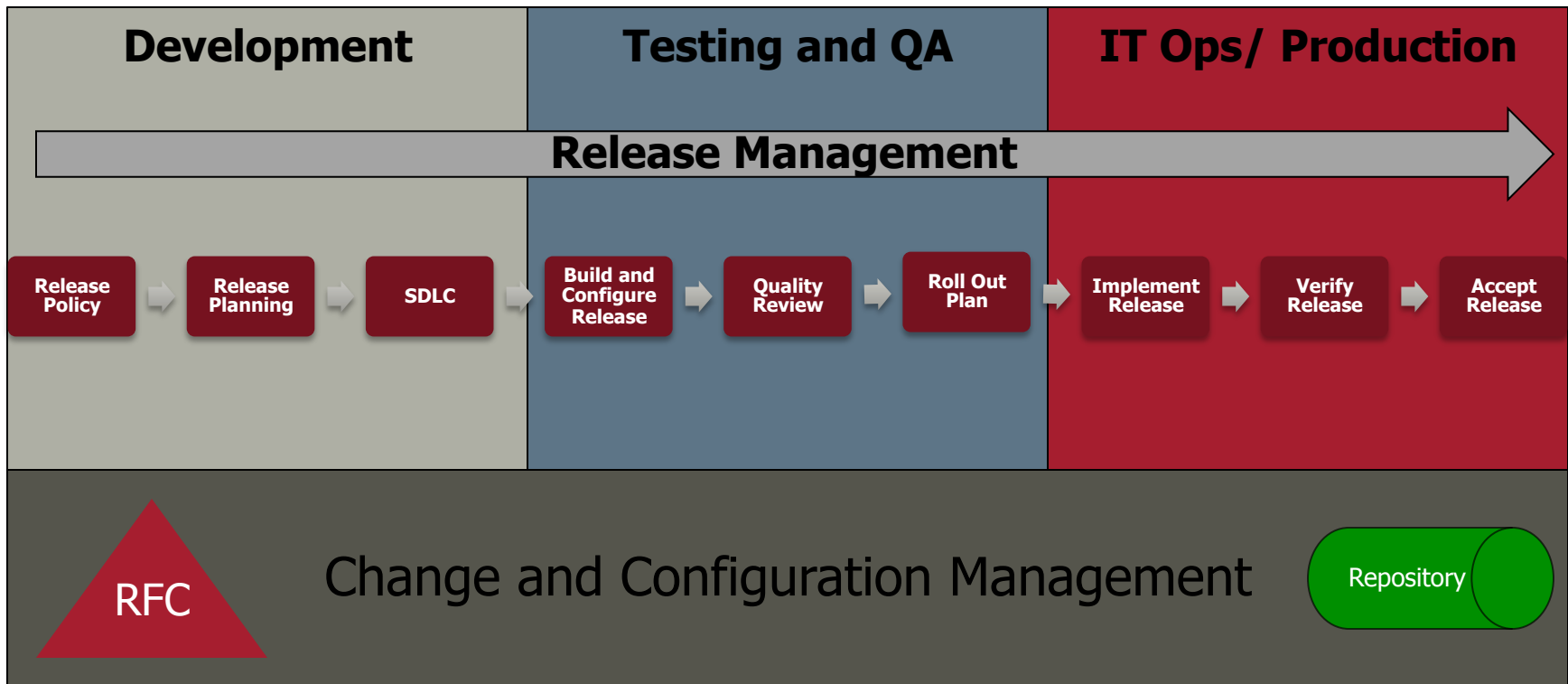
Revisiting release management



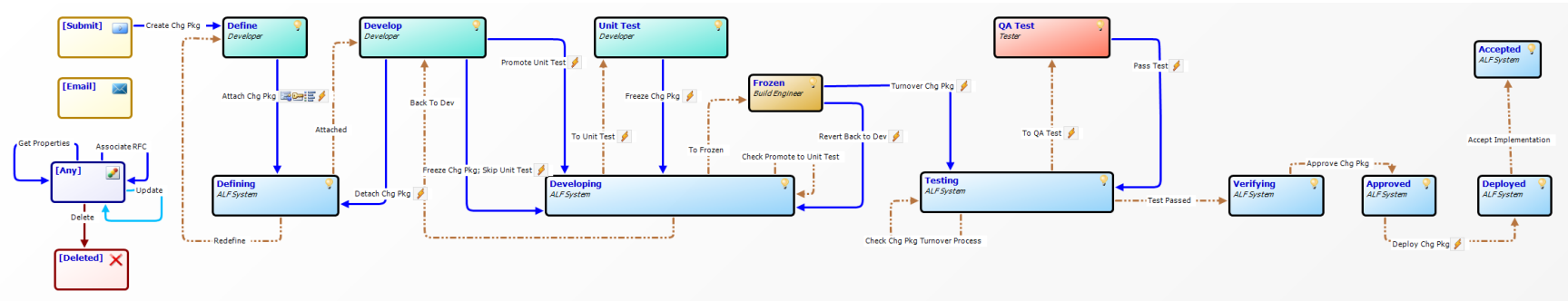
Conducting the Flow of Change



Release Management is Cross Organizational



Release Management is Process Centric



- Start with policies and processes first
- Support the entire release management process
- Provide support for the agreed levels of traceability
- Use tools to federate and automate across the release management process rather than defining a process which fits the tools

Release Management Principles

- Release Policy - agreement with the business and all relevant parties
- Release need to be well planned in advance
- Emergency releases are managed in line with the emergency change procedure
- Risk of backing out or remediating a failed release are assessed and managed
- Success and failures of releases is measured with the aim of improving effectiveness and efficiency while optimizing costs.

- Defined for one or more services/applications
- Naming conventions
- Types of releases
- Expected frequencies
- Building the test environment
- What are the backout plans?
- Gate review criteria
- Approach for grouping and prioritizing changes
- Roles and responsibilities
- Entry and exit criteria for each process transition state

Release Planning – The Release Calendar

- Composed of state names and date/time fields.
- Should be tied to a release type.
- Types might be major, minor, emergency..etc.
- Associated with specific high level workflows.
- Information for enforcement, notification and reporting

Sample Minor Release Calendar

Release	Business Requirements		Design		Development		Functional Testing		User Testing		Brick & Mortar Testing		Staging		Install
	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	Start	End	
3-Jan-08	17-Nov-07	26-Nov-07	27-Nov-07	29-Nov-07	30-Nov-07	10-Dec-07	11-Dec-07	20-Dec-07	21-Dec-07	25-Dec-07	26-Dec-07	31-Dec-07	1-Jan-08	2-Jan-08	Wednesday, January 02, 2008
10-Jan-08	26-Nov-07	4-Dec-07	5-Dec-07	7-Dec-07	10-Dec-07	18-Dec-07	19-Dec-07	28-Dec-07	31-Dec-07	2-Jan-08	3-Jan-08	8-Jan-08	9-Jan-08	10-Jan-08	Thursday, January 10, 2008
17-Jan-08	3-Dec-07	11-Dec-07	12-Dec-07	14-Dec-07	17-Dec-07	25-Dec-07	26-Dec-07	4-Jan-08	7-Jan-08	9-Jan-08	10-Jan-08	15-Jan-08	16-Jan-08	17-Jan-08	Thursday, January 17, 2008
24-Jan-08	10-Dec-07	18-Dec-07	19-Dec-07	21-Dec-07	24-Dec-07	1-Jan-08	2-Jan-08	11-Jan-08	14-Jan-08	16-Jan-08	17-Jan-08	22-Jan-08	23-Jan-08	24-Jan-08	Thursday, January 24, 2008
31-Jan-08	17-Dec-07	25-Dec-07	26-Dec-07	28-Dec-07	31-Dec-07	8-Jan-08	9-Jan-08	18-Jan-08	21-Jan-08	23-Jan-08	24-Jan-08	29-Jan-08	30-Jan-08	31-Jan-08	Thursday, January 31, 2008
7-Feb-08	24-Dec-07	1-Jan-08	2-Jan-08	4-Jan-08	7-Jan-08	15-Jan-08	16-Jan-08	25-Jan-08	28-Jan-08	30-Jan-08	31-Jan-08	5-Feb-08	6-Feb-08	7-Feb-08	Thursday, February 07, 2008
14-Feb-08	31-Dec-07	8-Jan-08	9-Jan-08	11-Jan-08	14-Jan-08	22-Jan-08	23-Jan-08	1-Feb-08	4-Feb-08	6-Feb-08	7-Feb-08	12-Feb-08	13-Feb-08	14-Feb-08	Thursday, February 14, 2008
28-Feb-08	14-Jan-08	22-Jan-08	23-Jan-08	25-Jan-08	28-Jan-08	5-Feb-08	6-Feb-08	15-Feb-08	18-Feb-08	20-Feb-08	21-Feb-08	26-Feb-08	27-Feb-08	28-Feb-08	Thursday, February 28, 2008
6-Mar-08	21-Jan-08	29-Jan-08	30-Jan-08	1-Feb-08	4-Feb-08	12-Feb-08	13-Feb-08	22-Feb-08	25-Feb-08	27-Feb-08	28-Feb-08	4-Mar-08	5-Mar-08	6-Mar-08	Thursday, March 06, 2008
13-Mar-08	28-Jan-08	5-Feb-08	6-Feb-08	8-Feb-08	11-Feb-08	19-Feb-08	19-Feb-08	29-Feb-08	3-Mar-08	5-Mar-08	6-Mar-08	11-Mar-08	12-Mar-08	13-Mar-08	Thursday, March 13, 2008

Gate Review Criteria

Gate	Green	Action Plan	Owner
Requirements	Requirements approved by Project Mgr	<ul style="list-style-type: none">• Create mitigation plan to get back on track• App team sign off on impacts	Business Analysts
Code Complete	<ul style="list-style-type: none">• All code and unit testing complete• No code in "dev" status• QA able to test	<ul style="list-style-type: none">• Mitigation plan• QA Mgr Sign off	Development Manager
Functions Testing Complete	<ul style="list-style-type: none">• All testing done and signed off• Ready for regression testing	<ul style="list-style-type: none">• Testing complete and signed off• Obtain signoffs from group leads	QA Manager
Regression Testing Complete	<ul style="list-style-type: none">• 100% of new code regression tested• User sign off	<ul style="list-style-type: none">• Ensure all code 100% regression tested• Obtain user approval• Or Senior Mgmt Approval of risk	QA Manager

- Consists of one or more Release Units
- Generally associated with an application or project
- Associated with a release type (maj,min,emer)
- Release type determines the workflow/process

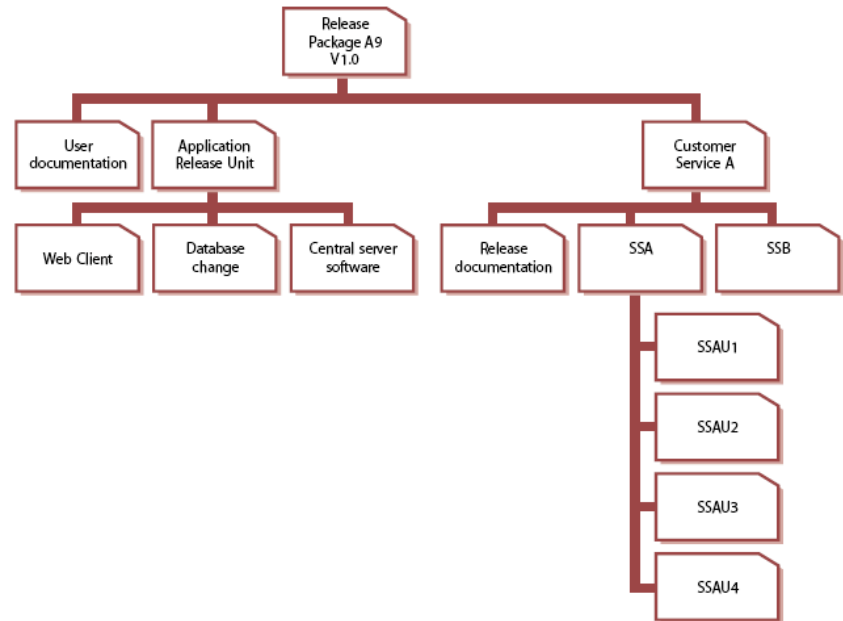
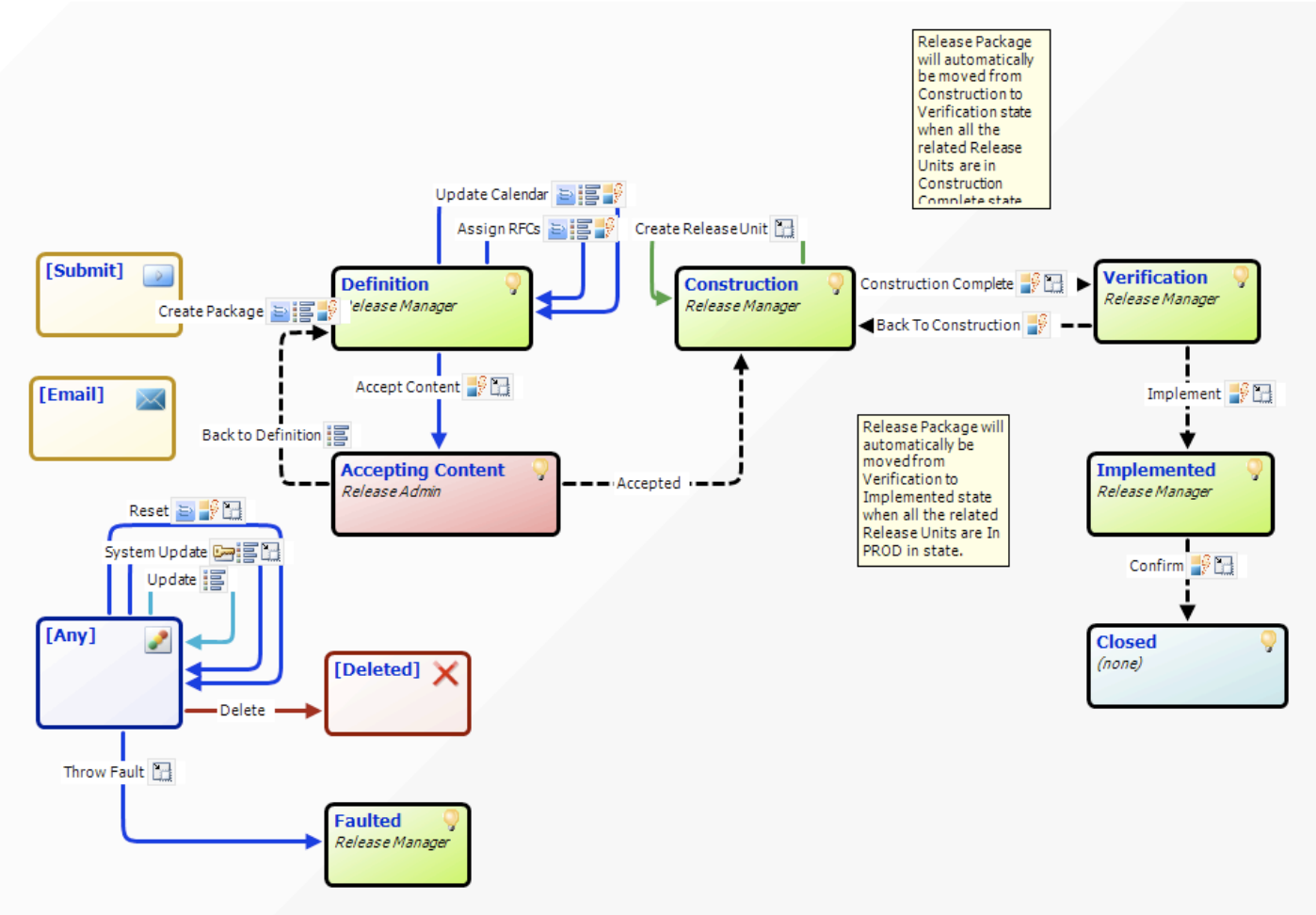


Figure 4.19 Example of a release package

Release Package Process

Graphical view of Project: Wealth Management



- Describes a portion of a service or IT infrastructure that it normally released together.
- Unit may vary, depending on the type(s) or item(s) of service assets
- Helps further isolate changes within a release.

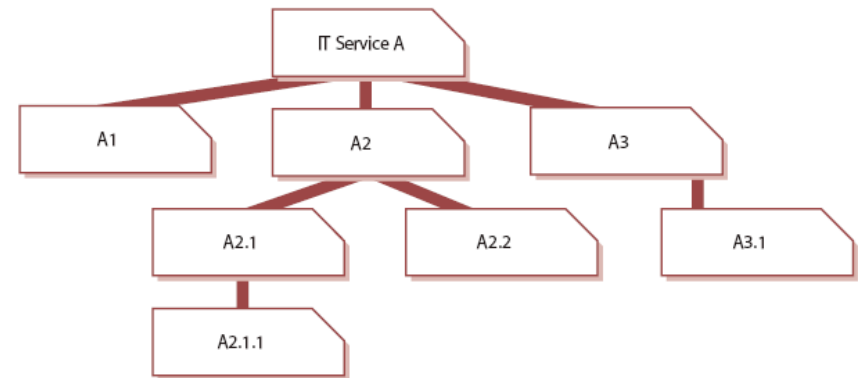


Figure 4.15 Simplified example of release units for an IT service

Metric Reporting and Dashboards

Serena Software, Inc. (http://www.serena.com)

SERENA BUSINESS MASHUPS

Release Calendar | Release Packages | Release Units | More...

Welcome, ARM System Admin | ID Search... | Quick Links

Release Managers Dashboard

Calendar State report for Release Packages

WCR State by Calendar Release

Release Package Report

Now showing Release Packages 1 - 20 of 22 | Sorted by: Project (Hierarchy)

RP Id	RP Type	Title	State	PROD Start Time	PROD End Time	Submit Date	Release Manager
MAJ000212	Major	implement reporting	Construction	10/20/2009 11:00:00 AM	10/22/2009 11:00:00 PM	04/07/2009 03:36:38 PM	Kathy Manager
MAJ000232	Major	New Sox Support	Verification	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/09/2009 03:58:20 PM	Kathy Manager
MAJ000233	Major	Add new portfolio performance support	Construction	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/09/2009 04:08:46 PM	Kathy Manager
MAJ000240	Major	Demo wealth management major release 200904	Construction	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/09/2009 05:01:37 PM	Kathy Manager
MAJ000249	Major	Add new server components for the Websphere server support group	Definition	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/10/2009 10:32:35 AM	Kathy Manager
MIN000254	Minor	Fix graphics engine for Mac users	Construction	05/28/2009 12:00:00 AM	05/30/2009 12:00:00 AM	04/10/2009 10:44:38 AM	Kathy Manager
MAJ000283	Major	Add new support for audit	Verification	10/20/2009 11:00:00 PM	10/22/2009 11:00:00 PM	04/18/2009 07:40:57 AM	Kathy Manager
MAJ000287	Major	This is a major release for HPS	Construction	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/18/2009 11:31:41 AM	Kathy Manager
MAJ000321	Major	Tax planning release LCG	Verification	10/20/2009 11:00:00 PM	10/22/2009 11:00:00 PM	04/21/2009 11:11:28 PM	Kathy Manager
MAJ000326	Major	test log	Verification	10/20/2009 11:00:00 PM	10/22/2009 11:00:00 PM	04/22/2009 06:30:36 AM	Kathy Manager
MAJ000333	Major	Retirement planning	Verification	10/20/2009 11:00:00 PM	10/22/2009 11:00:00 PM	04/22/2009 11:55:05 AM	Kathy Manager
MAJ000341	Major	Wealth mgmt demo test LCG	Construction	10/20/2009 11:00:00 PM	10/22/2009 11:00:00 PM	04/28/2009 05:55:43 AM	Kathy Manager
MAJ000347	Major	College savings	Verification	10/20/2009 11:00:00 PM	10/22/2009 11:00:00 PM	04/28/2009 08:04:02 AM	Kathy Manager

RP Id	RP Type	Title	State	PROD Start Time	PROD End Time	Submit Date	Release Manager
MAJ000229	Major	New support for SOX reporting	Construction	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/09/2009 03:18:33 PM	Joe Manager
MAJ000248	Major	Add new server components for the Websphere server support group	Definition	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/10/2009 10:31:54 AM	Kathy Manager
MAJ000250	Major	Improve scalability support	Construction	05/04/2009 12:00:00 AM	06/30/2009 12:00:00 AM	04/10/2009 10:33:11 AM	Kathy Manager
MIN000253	Minor	Add fixes for the web server	Construction	05/28/2009 12:00:00 AM	05/30/2009 12:00:00 AM	04/10/2009 10:43:25 AM	Kathy Manager

Release Management Metrics

- Number of RFCs raised
- Percentage of emergency releases (Submission rate)
- Number of changes made by the release team
- Number of successful installations
- Number of builds/deployments aborted
- Percentage of installs performed on schedule
- Number of failed or backed out releases
- Number of unauthorized changes deployed to production
- Resource cost per release
- Service time lost due to release activity
- Number of defects per state, team, release unit, release
- Percentage of gates missed per team
- Average time in process state

Introducing Orchestrated Application Delivery

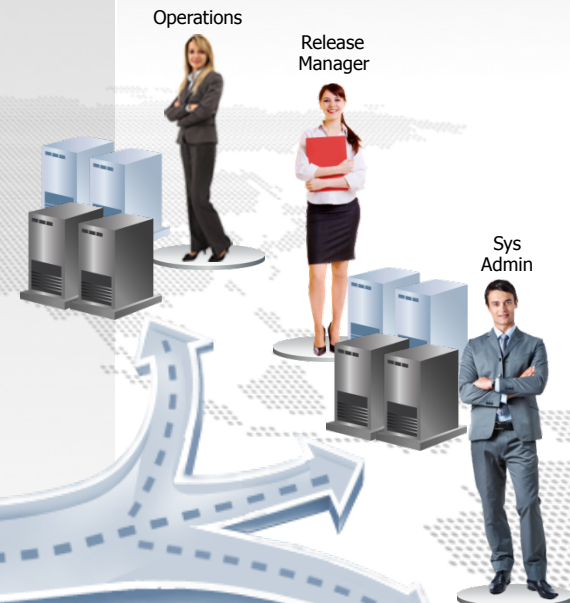
Demand



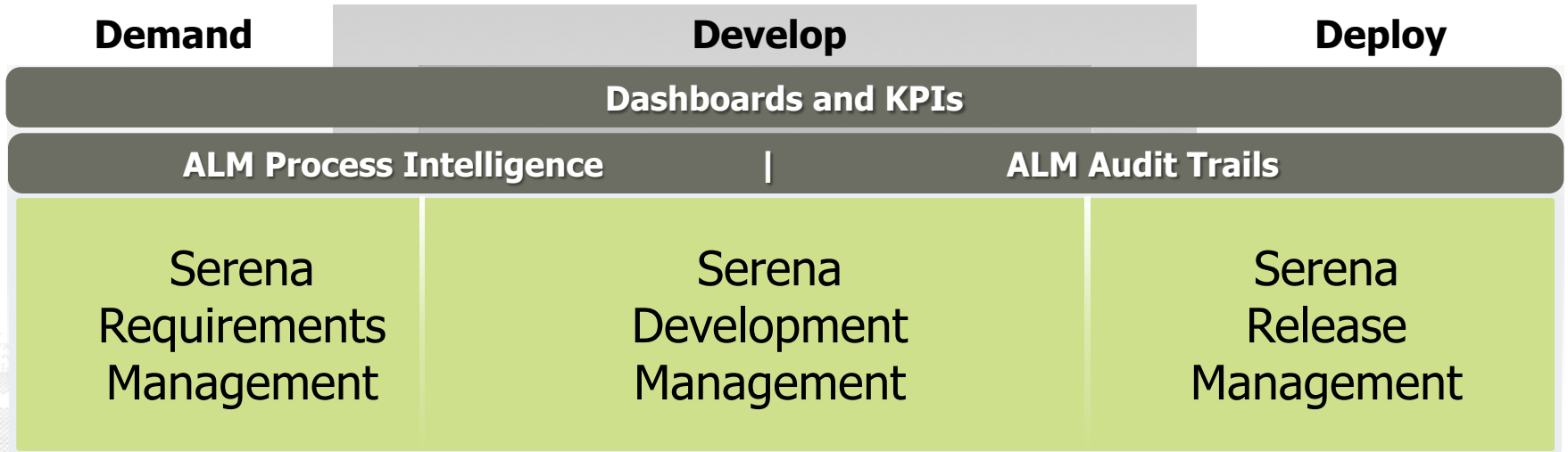
Develop



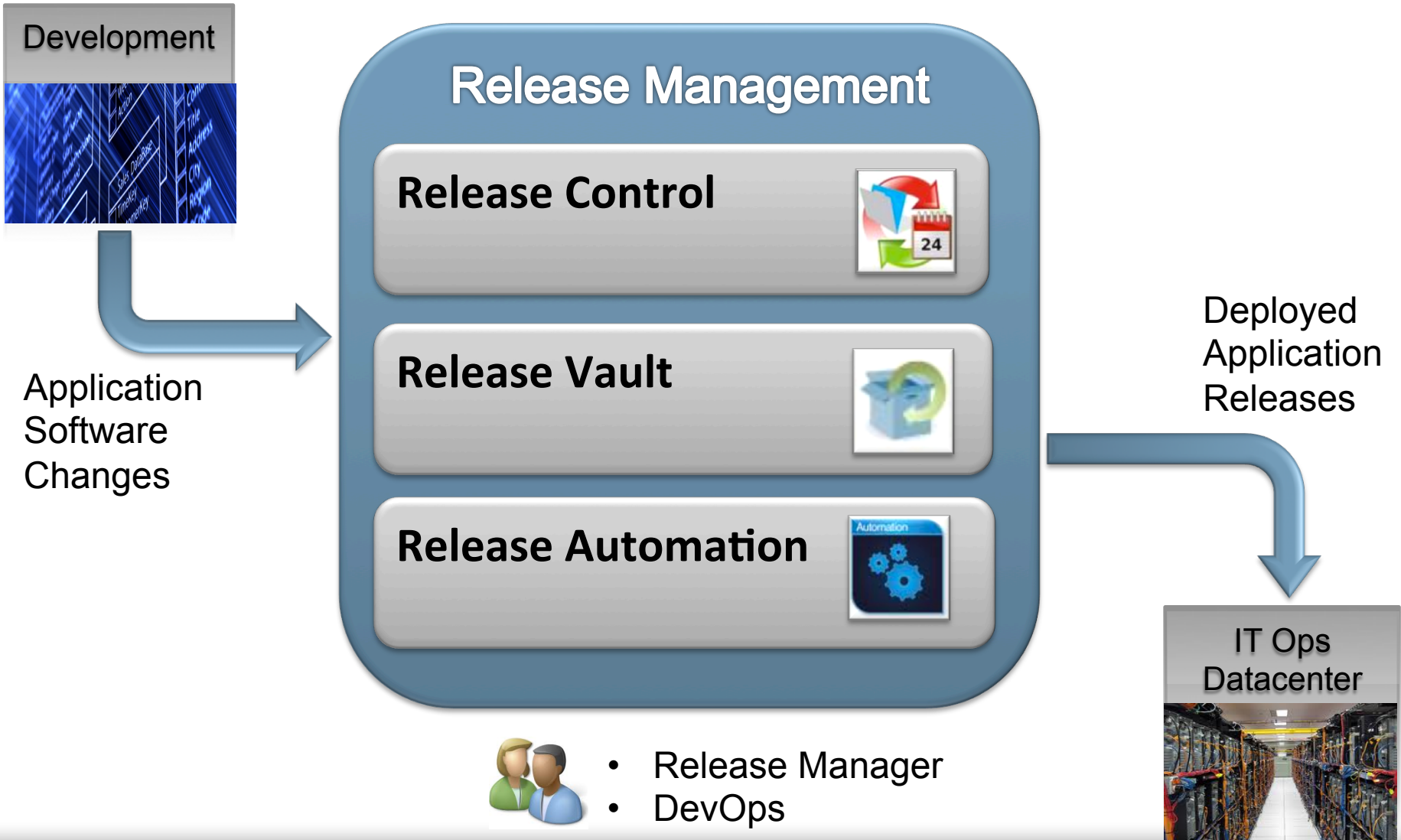
Release



Serena Orchestrated ALM



Serena Release Management



Release Control

Change Requests | Release Calendar | Release Packages | More...

Welcome, Kathy Manager | Search... | Quick Links:

Release Manager's Dashboard

01/12/2010 06:16:46 AM

Calendar State report for Release Packages

01/12/2010 06:16:47 AM

Release Packages by State and Project

01/12/2010 06:16:47 AM

State	Project			Total(s)
	Wealth Management	Accounts Payable	Accounts Receivable	
Construction	19	6	2	27
Definition	2	1	0	3
Faulted	1	0	1	2
Implemented	6	5	2	13
Verification	22	0	0	22
Totals by Project	50	12	5	67

Release Package Report

01/12/2010 06:16:47 AM

Now showing Release Packages 1 - 20 of 67 | Sorted by: Project (Hierarchy), Submit Date

Release Package Project > Wealth Management

RP Id	RP Type	Title	State	PROD Start Time	PROD End Time	Submit Date	Release Manager
<input type="checkbox"/> MAJ000648	Major	Variable Life Annuity Major Release LCG	Construction	12/19/2010 01:00:00 AM	12/31/2010 01:00:00 AM	01/10/2010 11:55:44 PM	Kathy Manager
<input type="checkbox"/> MAJ000644	Major	Major release for St Albans Abby	Verification	12/19/2010 01:00:00 AM	12/31/2010 01:00:00 AM	01/07/2010 04:00:13 AM	Kathy Manager
<input type="checkbox"/> MAJ000643	Major	Major Release for Acme Data	Definition	01/16/2010 12:00:00 AM	01/31/2010 12:00:00 AM	01/05/2010 01:38:08 PM	Kathy Manager
<input type="checkbox"/> MAJ000637	Major	New feature for Project Arrowhead	Implemented	12/29/2009 01:00:00 AM	12/31/2009 01:00:00 AM	12/13/2009 01:34:45 PM	Joe Manager
<input type="checkbox"/> MAJ000624	Major	Retirement Planning really REY	Implemented	12/29/2009 01:00:00 AM	12/31/2009 01:00:00 AM	12/10/2009 01:40:04 PM	Kathy Manager
<input type="checkbox"/> MAJ000616	Major	Investment planning advice REY	Verification	01/16/2010 12:00:00 AM	01/31/2010 12:00:00 AM	12/09/2009 01:50:19 PM	Kathy Manager

Release Vault

Serena Dimensions CM Web Client - Windows Internet Explorer

http://dimensionspreview.serena.com/dimensions/

File Edit View Favorites Tools Help

Serena Dimensions CM Web Client

My Current Project Items Requests Projects Streams Baselines Deployment Reports

DMADMIN Help Log out

All Areas

- All Areas
 - DEV
 - SIT
 - LCL_SIT_JBRNCHA_AREA01
 - LCL_SIT_JBRNCHA_AREA02
 - LCL_SIT_JBRNCHA_AREA03
 - LCL_SIT_JMAIN_AREA01
 - LCL_SIT_JMAIN_AREA02
 - LCL_SIT_VSBRNCHA_AREA01
 - LCL_SIT_VSBRNCHA_AREA02
 - LCL_SIT_VSMAN_AREA01
 - LCL_SIT_VSMAN_AREA02
 - QA
 - LCL_QA_JBRNCHA_AREA01
 - QLARIUS:JAVA_BRANCHA_STR
 - LCL_QA_JBRNCHA_AREA02
 - QLARIUS:JAVA_BRANCHA_PRJ
 - LCL_QA_JBRNCHA_AREA03
 - LCL_QA_JMAIN_AREA01
 - LCL_QA_JMAIN_AREA02
 - LCL_QA_VSBRNCHA_AREA01
 - LCL_QA_VSBRNCHA_AREA02

Pending Queue History

Show All occurred in last 3 months Page 1 of 1 Displaying 1 to 24

	Name	Detail	Event Type	Event Description	Reason	Event Result
<input type="checkbox"/>	DBIO.class	Qlarius Underwriter/class	Promotion	PROMOTE	Item promoted from DE	Succeeded
<input type="checkbox"/>	AutoQuote.java	Qlarius Underwriter/qlariu	Deployment	DEPLOY	Deployed as a result c	Succeeded
<input type="checkbox"/>	AutoQuote.java	Qlarius Underwriter/qlariu	Promotion	PROMOTE	Cos	Succeeded
<input type="checkbox"/>	AutoQuote.java	Qlarius Underwriter/qlariu	Deployment	DEPLOY	Deployed as a result c	Succeeded
<input type="checkbox"/>	AutoQuote.java	Qlarius Underwriter/qlariu	Promotion	PROMOTE	Item promoted from DE	Succeeded
<input type="checkbox"/>	build_script_ant.s	Qlarius Underwriter/templ	Deployment	DEPLOY		Failed
<input type="checkbox"/>	build_script_ant.s	Qlarius Underwriter/templ	Deployment	DEPLOY		Failed
<input type="checkbox"/>	build_script_ant.s	Qlarius Underwriter/templ	Deployment	DEPLOY		Failed
<input type="checkbox"/>	build_script_ant.s	Qlarius Underwriter/templ	Deployment	DEPLOY		Failed
<input type="checkbox"/>	index.html	Qlarius Underwriter/webs	Deployment	DEPLOY		Failed
<input type="checkbox"/>	dashed_line.gif	Qlarius Underwriter/webs	Deployment	DEPLOY		Failed
<input type="checkbox"/>	main.css	Qlarius Underwriter/webs	Deployment	DEPLOY		Failed

Project: QLARIUS:MAINLINE_JAVA_PRJ change settings Work Area: c:\templ\dimensions_preview change Product: QLARIUS change Authentication

Local intranet 100%

Release Automation

The screenshot displays the Nolio Automation Center interface. The title bar reads "Nolio Automation Center [Logged in as superuser]". The menu bar includes "File", "Activity", "Administration", and "Help". The main toolbar contains "New Process", "Save", "Test", and "Run Process" buttons.

The left sidebar, titled "Navigation Panel", shows a tree view for "WebApplication1". Under the "Processes" tab, the "Process: Version upgrade" is selected. The main workspace displays a process flow diagram titled "Process: Upgrade Web Application".

The process flow is divided into two server types: "Web Server" and "Execution Server".

- Web Server:**
 - Add action
 - Web Server: Copy new WEB content
 - Web Server: Copy new BvT
- Execution Server:**
 - Add action
 - Execution Server: Perform upload from "Release Candidate"?
 - Execution Server: Upload WEB content (from "Release Can...
 - Execution Server: Extract WEB content (on X:
 - Execution Server: Delete archived WEB content (on X:)
 - Execution Server: Verify if WEB content versic exists ...

Arrows indicate the flow from the Execution Server's "Perform upload" step to the Web Server's "Copy new WEB content" step, and from the Web Server's "Copy new BvT" step back to the Execution Server's "Extract WEB content" step.

The status bar at the bottom right shows the URL "http://localhost:8080".

Serena Release Management

Notio Automation Center [Logged in as superuser]

File Activity Administration Help

New Process Save Test Run Process

Navigation Panel

- WebApplication1
 - Components
 - Processes
 - WebApplication1 (14)
 - Data Center, Disaster Recovery - BANA (1)
 - Data Center, Disaster Recovery - ENT + SMB
 - Data Center, Env. Alpha (1)
 - Default (4)
 - Process: Switch peripheral to spare
 - Process: Version rollback
 - Process: Version upgrade
 - Process: Version upgrade
 - Data Center, Env. BANA (1)
 - Data Center, Env. ENT + SMB (1)
 - Data Center, Env. UK (1)
 - Data Center, Procedure Specific - Spare App
 - Server, Application Federation (1)
 - Server, Web (1)
 - Default (6)
 - Environments

Process: Upgrade Web Application

Manage Server Types Advanced

Overview Zoom In Z

Web Server

- Add action
 - Web Server
 - Copy new WEB content
 - Web Server
 - Copy new BUff

Execution Server

- Add action
 - Perform upload from "Release Candidate?"
 - Upload WEB content (from "Release Can...
 - Extract WEB content (on X...
 - Execution Server
 - Delete archived WEB content (on X...)
 - Execution Server
 - Verify if WEB content versio exists ...

Total of 87 items, 1 selected

Processes Reports Administration

http://localhost:8080 Log out

Release Automation

Change Requests Release Calendar Release Packages More...

Welcome, Kathy Manager Search...

Release Manager's Dashboard

Calendar State report for Release Packages

01/12/2010 06:16:47 AM

Number of Items

125% 100% 75% 50% 25% 0%

2009-Closed 2009-Closed 2009-Closed 2009-Closed 2009-Closed 2009-Closed

2010-Available 2010-Available 2010-Available 2010-Available 2010-Available 2010-Available

App-Closed 2010-Available

Release Package Report

Now showing Release Packages 1 - 20 of 67 Sorted by: Project (Hierarchy), Submit Date

RP Id	Project	Definition	Implementation	Verification	PROD Start Time
MAJ000648	Major		Definition		12/19/2010 01:00:00 AM
MAJ000644	Major		Definition		12/19/2010 01:00:00 AM
MAJ000643	Major	Major Release for Acme Data	Definition		01/16/2010 12:00:00 AM
MAJ000637	Major	New feature for Project Arrowhead	Implemented		12/29/2009 01:00:00 AM
MAJ000624	Major	Retirement Planning really REY	Implemented		12/29/2009 01:00:00 AM
MAJ000616	Major	Investment allocation advice REY	Verification		01/16/2010 12:00:00 AM

Release Control

Pending Queue History

Show All occurred in last 3 months Page 1 of 1 Displaying 1 to 24

Name	Detail	Event Type	Event Description	Reason	Event Result
DBIO class	Glarius Underwriter/class	Promotion	PROMOTE	Item promoted from DE	Succeeded
AutoQuote.java	Glarius Underwriter/qglariu	Deployment	DEPLOY	Deployed as a result c	Succeeded
AutoQuote.java	Glarius Underwriter/qglariu	Promotion	PROMOTE	Cos	Succeeded
AutoQuote.java	Glarius Underwriter/qglariu	Deployment	DEPLOY	Deployed as a result c	Succeeded
AutoQuote.java	Glarius Underwriter/qglariu	Promotion	PROMOTE	Item promoted from DE	Succeeded
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed
build_script_ant.s	Glarius Underwriter/templ	Deployment	DEPLOY		Failed

Project: QLARIUS:MAINLINE_JAVA_PRJ change settings Work Area: c:\templ\dimensions_preview change Product: QLARIUS change Authentication

Local intranet 100%

Release Vault

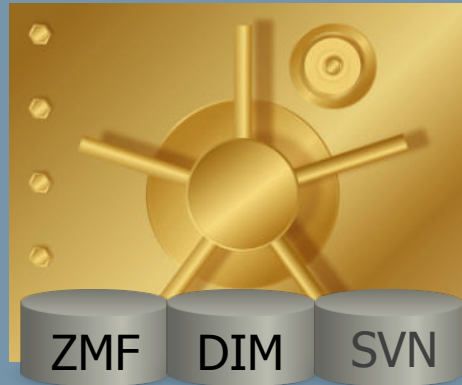
Serena Release Management Solution

Release Control



Plan, Manage &
Approve Releases

Release Vault



Secure Software
Path to Production

Release Automation



Automate Application
Configuration Tasks

Confidently Release Software

- Deliver More Releases With Fewer Resources
- Improve Production Uptime
- Audit Ready with Start-to-Finish Traceability

Release Management Summary



Develop a repeatable unified set of processes using the release policy as input

Leverage ITIL

You don't have to "Rip and Replace"

Automate and optimize where possible

Ensure 'end to end' traceability

Measure, manage and report

Thank You