

The Complete ServiceNow System Administrator Course

Section 8 - System Administration



Course Outline

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2 ServiceNow Overview

3 Lists, Forms, & the UI

4 Customizations

5 Tables & Fields

6 User Administration

7 Core Applications

8 System Administration

9 Building A Custom App

Section Outline

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Basic Configuration

- Define common properties
- Configure logo, colors, and banner text
- Configure system defaults

System Configuration

Tailor the look of the page top banner - text / logo / color
Set the timezone, date, and time formats

Page header caption

The Complete ServiceNow System Administrator Course

Browser tab title

System timezone for all users unless overridden in the user's record

System (US/Pacific)

[Configure available time zones](#)

Banner image for UI16

ServiceNow



Date format

yyyy-MM-dd

Time format

HH:mm:ss (24 hour)

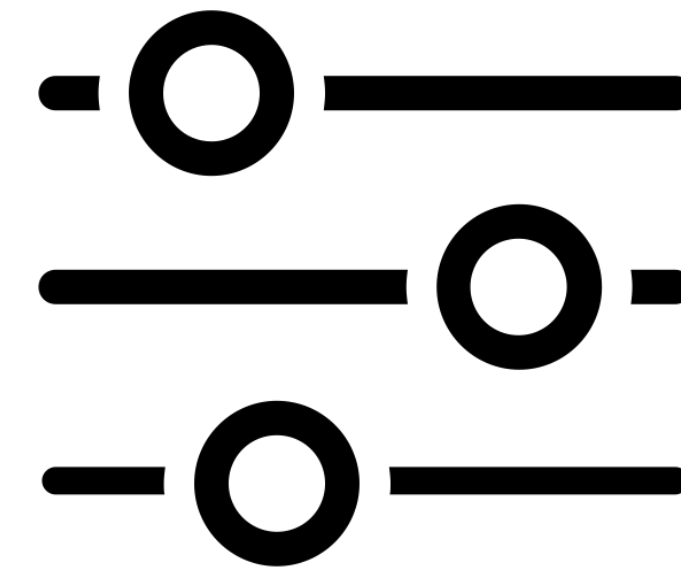
Header background color

#303a46



System Properties

- **sys_properties** table
- Hundreds of system properties
- Categories
- Examples
 - List v3 properties
 - UI properties
 - Email properties
 - System properties
 - Global text search properties



< ≡ System Property
change.conflict.blackout

* Name	<input type="text" value="change.conflict.blackout"/>
Description	<input type="text" value="When checking change request conflicts, check against blackout windows"/>
Choices	<input type="text"/>
Type	<input type="text" value="true false"/>
Value	<input type="text" value="true"/>

Basic Configuration & System Properties

Demo

Dashboards

- Dashboards are the new homepages
- May contain reports, and dashboard widgets
- Any user may create a new dashboard

Dashboards

New


Recent

Owned by Me

Shared with Me

All

Search by name or group




CMDB Dashboard

Owner

CMDB Dashboard - CMDB View

Owned by admin




CMDB Dashboard

Owner

CMDB Dashboard - Service View

Owned by admin




Other

Owner

Guided Tours Overview

Owned by admin




Other

Owner

Admin Console

Owned by admin




Other

Owner

Analytics Usage Overview


Owned by admin



Incident

Editor

Incident Management



Other



Owner

System Administration

Owned by admin

Self-Service

- Accessible by every user in ServiceNow
- Does not require a role
- Personalized information

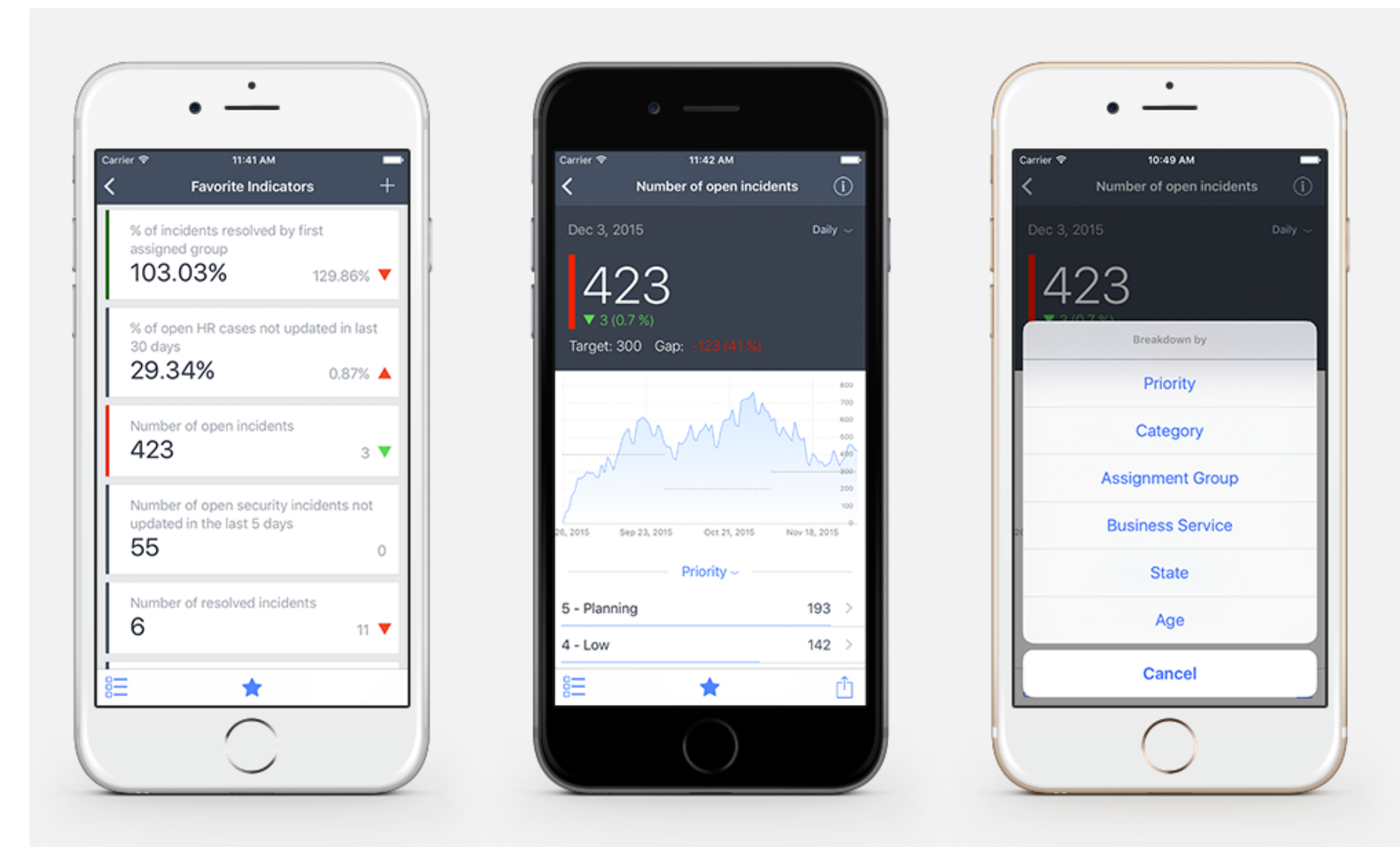
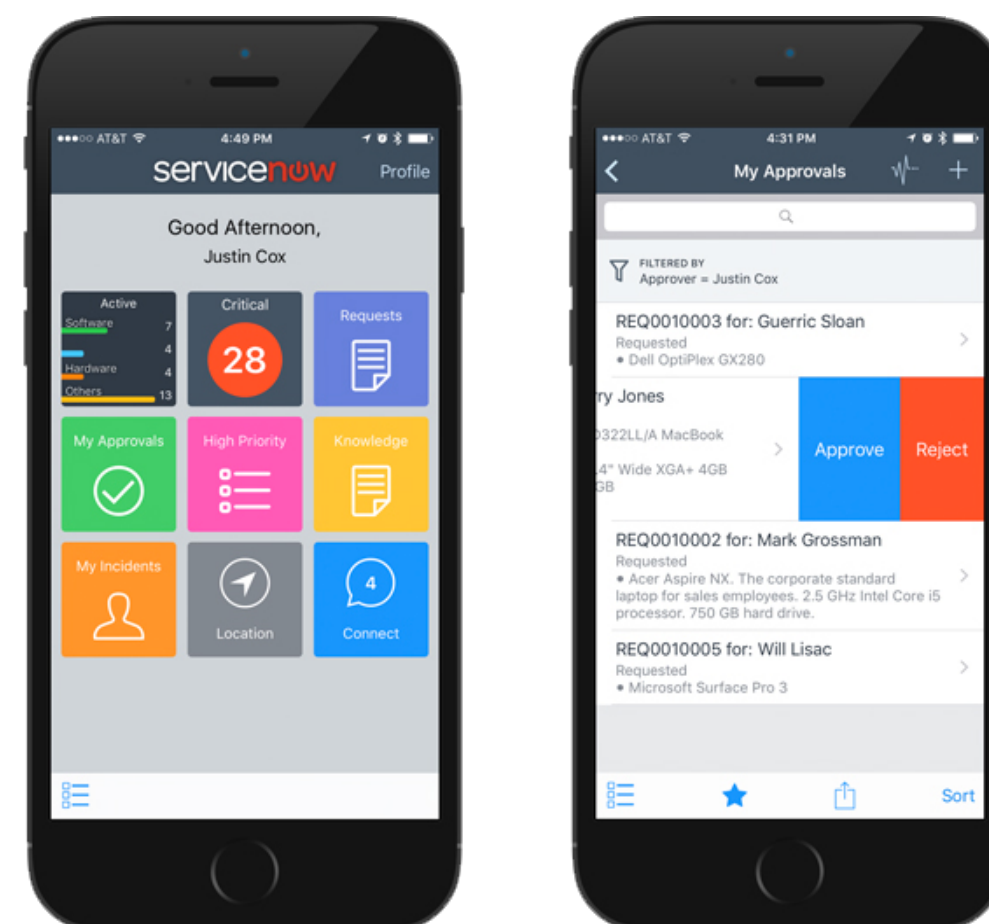
Self-Service	
Homepage	
Business Applications	
Dashboards	
Service Catalog	
Knowledge	
Help the Help Desk	
Visual Task Boards	
Connect Chat	
Incidents	
Watched Incidents	
My Requests	
Requested Items	
Watched Requested Items	 

Dashboards, & Self-Service

Demo

Mobile

- ServiceNow mobile app (native app)
 - iOS & Android
- ServiceNow mobile web app (browser)
- Leverage phone hardware



Upgrades

- Upgrade history
- stats.do for current version
- Request upgrades through ServiceNow HI

[<](#) Upgrade Monitor

No Upgrade Detected

Current: glide-kingston-10-17-2017__patch3-02-21-2018_03-02-2018_1305.zip

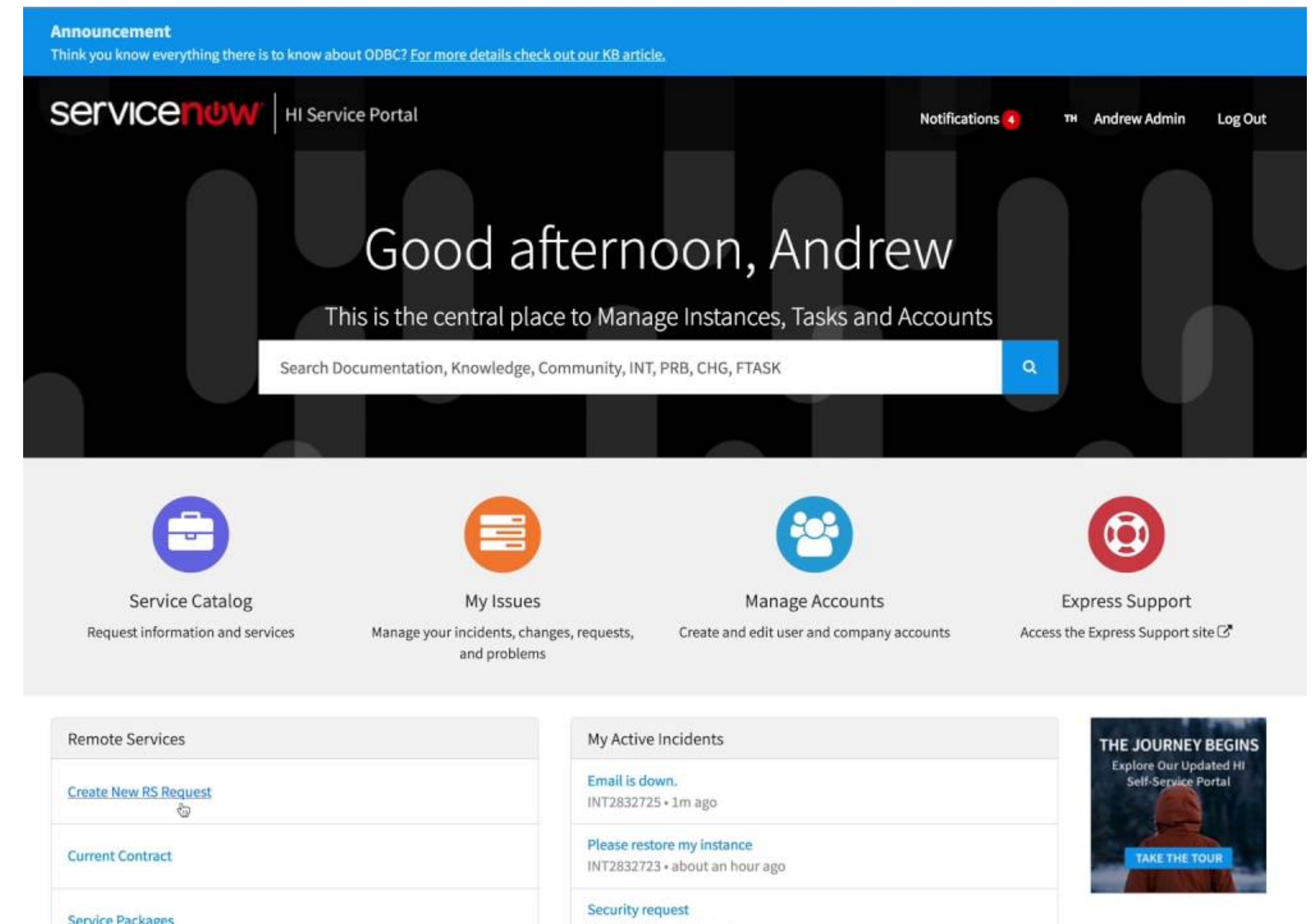
Next upgrade check: 2018-05-03 22:11:21

Check Now



ServiceNow HI

- Customer administration
- ServiceNow for ServiceNow
- hi.service-now.com
- Manage instances
 - Request upgrades
 - Request clones
 - Create incidents
- Access ServiceNow Knowledge Base



System Diagnostics



- stats.do
- Build information
- Memory allocation
- Semaphore information
- Response times
- Active sessions

Statistics for: Demo Server @ [dev26159.service-now.com:80](#) at: Thu May 03 21:07:52 PDT 2018 ([Refresh](#))
Connected to cluster node: app129168.sin1.service-now.com:dev26159001

Build name: Kingston
Build date: 03-02-2018_1305
Build tag: glide-kingston-10-17-2017__patch3-02-21-2018
Instance name: dev26159
Instance ID: d0f3bedb4fd7da007b9b220f0310c700
Node ID: bd1bd81ba666d4df87e4d7336fbcd45a
IP address: 10.132.129.168
MID buildstamp: kingston-10-17-2017__patch3-02-21-2018_03-02-2018_1305
Load-balancer status: Singleton:Online
Database latency: 4
Offering: enterprise
[Open Source software](#)

Servlet Memory
Max memory: 1980.0
Allocated: 530.0
In use: 363.0
Free percentage: 31.0

Servlet Statistics
Started: Thu May 03 20:54:07 PDT 2018
Cache built: Thu May 03 20:54:06 PDT 2018, flushes: 0
Transactions: 771
Errors handled: 1
Processor transactions: 284
Cancelled transactions: 0
Logged in sessions: 1 (1 active)
Maximum session concurrency: 18
Session timeout: 30 minutes
CometD sessions: 1
Java security manager policy: Enabled

System Diagnostics
Script Debugger
Diagnostics Page
Component Status
Progress Workers
Memory Stats
Active Transactions (All Nodes)
Upgrade Monitor
Upgrade History
Upgrade Log
Email Diagnostics
Expression Cache Stats  

Troubleshooting

- System logs
- Debugger
- ServiceNow Docs
- Community

Debug Log

```
21:10:15.670: *** End #307 /sys.scripts.do, user: admin, total time: 0:00:00.024, processing time: 0:00:00.024, SQL time: 0:00:00.002 (count: 4)
21:10:15.904: Time: 0:00:00.000 for: dev26159_1[glide.8] SELECT ... FROM sys_user_session sys_user_session0 WHERE sys_user_session0.`id` = '390CDE22DB311300C2AD5901CF9619E6' /*.../ ⓘ
21:10:15.918: TIME = 0:00:00.004 PATH = processor/RESTAPIProcessor/execute CONTEXT = RESTAPIProcessor Global RC = true RULE =
processor/RESTAPIProcessor/execute Global
21:10:15.919: #308 /api/now/embeddedhelp/sys.scripts/normal Parameters ----- api=api uri=/sys.scripts.do?action=run_module&sys_id=73dfa38e0a0a0a7900e90dc4edef08ff
21:10:15.922: Time: 0:00:00.000 for: dev26159_1[glide.11] SELECT ... FROM (sys_embedded_help_qualifier sys_embedded_help_qualifier0 INNER JOIN sys_metadata sys_metadata0 ON
sys_embedded_help_qualifier0.`sys_id` = sys_metadata0.`sys_id` ) WHERE sys_embedded_help_qualifier0.`path` = 'sys.scripts' AND sys_embedded_help_qualifier0.`fragment` IS NULL /*.../ ⓘ
21:10:15.925: Time: 0:00:00.001 for: dev26159_1[glide.13] SELECT ... FROM (sys_embedded_help_content sys_embedded_help_content0 INNER JOIN sys_metadata sys_metadata0 ON
sys_embedded_help_content0.`sys_id` = sys_metadata0.`sys_id` ) WHERE sys_embedded_help_content0.`page` = 'sys.scripts' AND sys_embedded_help_content0.`product` = 1 AND
(sys_embedded_help_content0.`version` = 'K' OR sys_embedded_help_content0.`version` = 'all') AND sys_embedded_help_content0.`modifier` = 'normal' AND sys_embedded_help_content0.`act
AND sys_embedded_help_content0.`sys_domain` = 'global' AND sys_embedded_help_content0.`qualifier` IS NULL ORDER BY
sys_embedded_help_content0.`snc_created`,sys_embedded_help_content0.`version` DESC,sys_embedded_help_content0.`role_order` /*.../ ⓘ
21:10:15.927: Time: 0:00:00.000 for: dev26159_1[glide.15] SELECT ... FROM sys_embedded_help_queue sys_embedded_help_queue0 WHERE sys_embedded_help_queue0.`resource_id` = 'sys.scripts-
/*.../ ⓘ
21:10:15.928: About to execute engine 'com.glide.usageanalytics.lef.LicenseEnforcementEngine' on table sys_embedded_help_queue
21:10:15.928: Finished executing engine 'com.glide.usageanalytics.lef.LicenseEnforcementEngine' on table sys_embedded_help_queue
21:10:15.929: About to execute engine 'com.glideapp.workflow.engine.WorkflowEngine' on table sys_embedded_help_queue
21:10:15.929: Finished executing engine 'com.glideapp.workflow.engine.WorkflowEngine' on table sys_embedded_help_queue
21:10:15.929: About to execute engine 'com.glide.data_policy.DataPolicyEngine' on table sys_embedded_help_queue
21:10:15.929: Finished executing engine 'com.glide.data_policy.DataPolicyEngine' on table sys_embedded_help_queue
21:10:15.929: About to execute engine 'com.glide.policy.UpdateSyncher' on table sys_embedded_help_queue
```

System Diagnostics

Script Debugger

▼ Session Debug

Enable All

Disable All

Debug Business Rule

Debug Business Rule (Details)

Debug Log

Debug SQL

Debug SQL (Detailed)

Debug Security

Debug Escalations

Debug Text Search

Debug UI Policies

Disable UI Policies Debug



Response Time

- Server
 - Process data
- Client
 - Render data
- Network
 - Transfer data

⌚ Response time(ms): 8890, Network: 4660, server: 688, browser: 3542

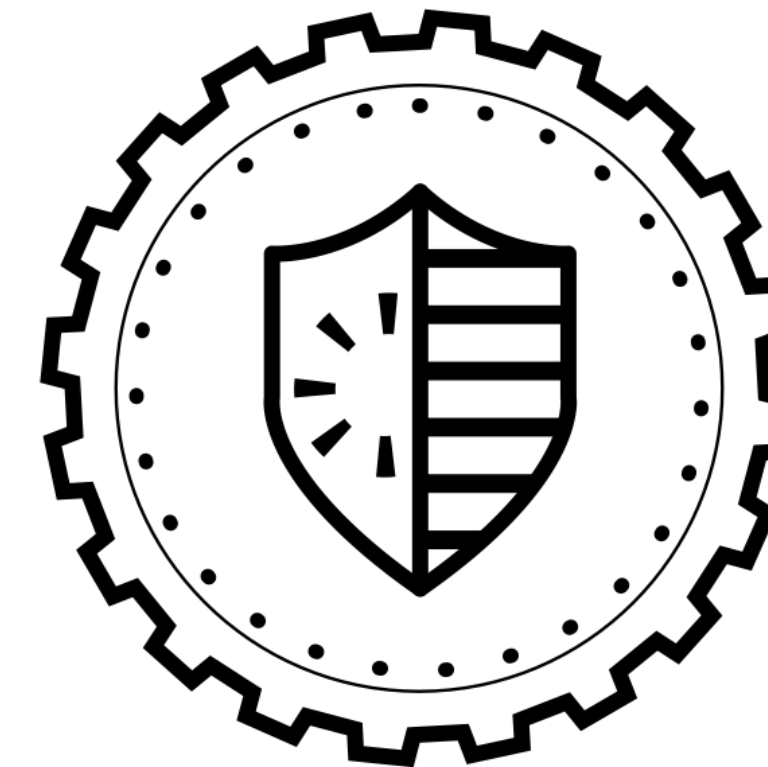


Diagnostics & Troubleshooting

Demo

Security

- High-Security plugin
- Security properties
- IP address access controls



High Security Settings - Default Enabled

The following properties are recommended to be enabled during a High Security deployment

Require basic authentication for incoming SCHEMA requests. [?](#)

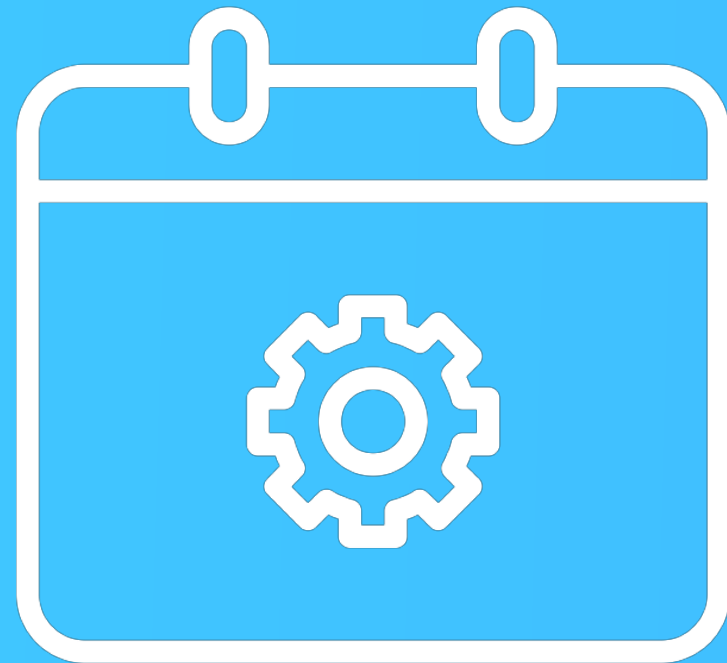
☒ Yes | No

Forces all scripts injected in Jelly to be escaped by default. Use noesc: to preserve special characters. [?](#)

☒ Yes | No

Escape XML values at the parser level for the user interface. This will prevent reflected and stored cross site scripting attacks. [?](#)

☒ Yes | No



Events

in ServiceNow

- Triggered by
 - User actions
 - Scripts
 - Time/Schedules
- Event queue
- Event registry
- Parameters

Event Queue

User saves record



Save record event

Create record
event

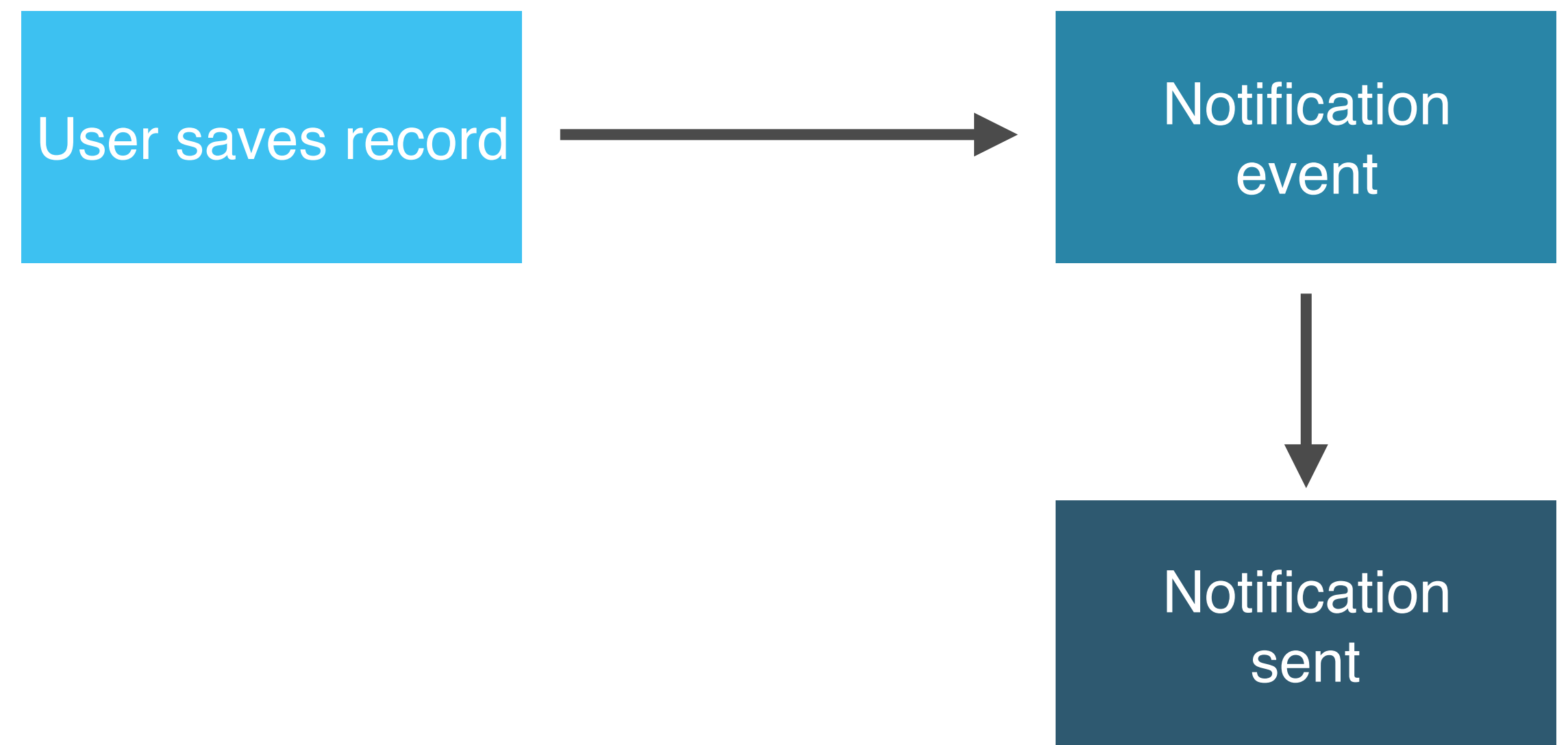
Login
event



Notifications

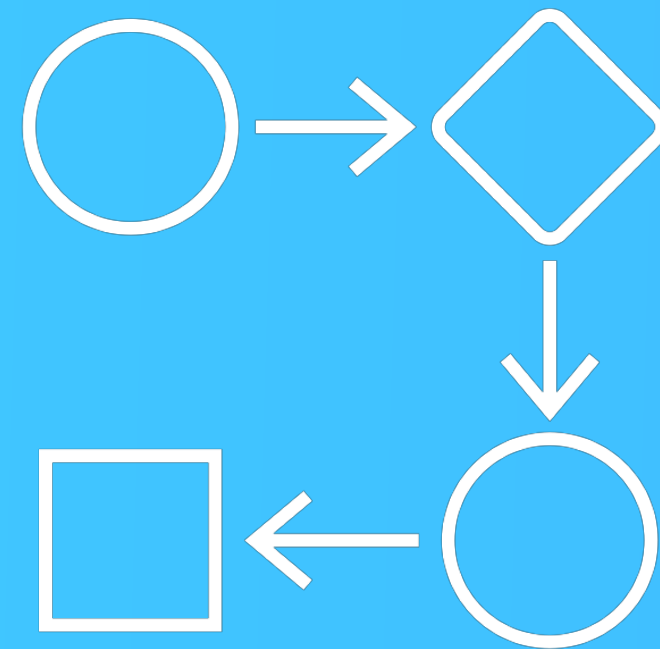
in ServiceNow

- Email, SMS
- Templates
- Triggered by events



Events & Notifications

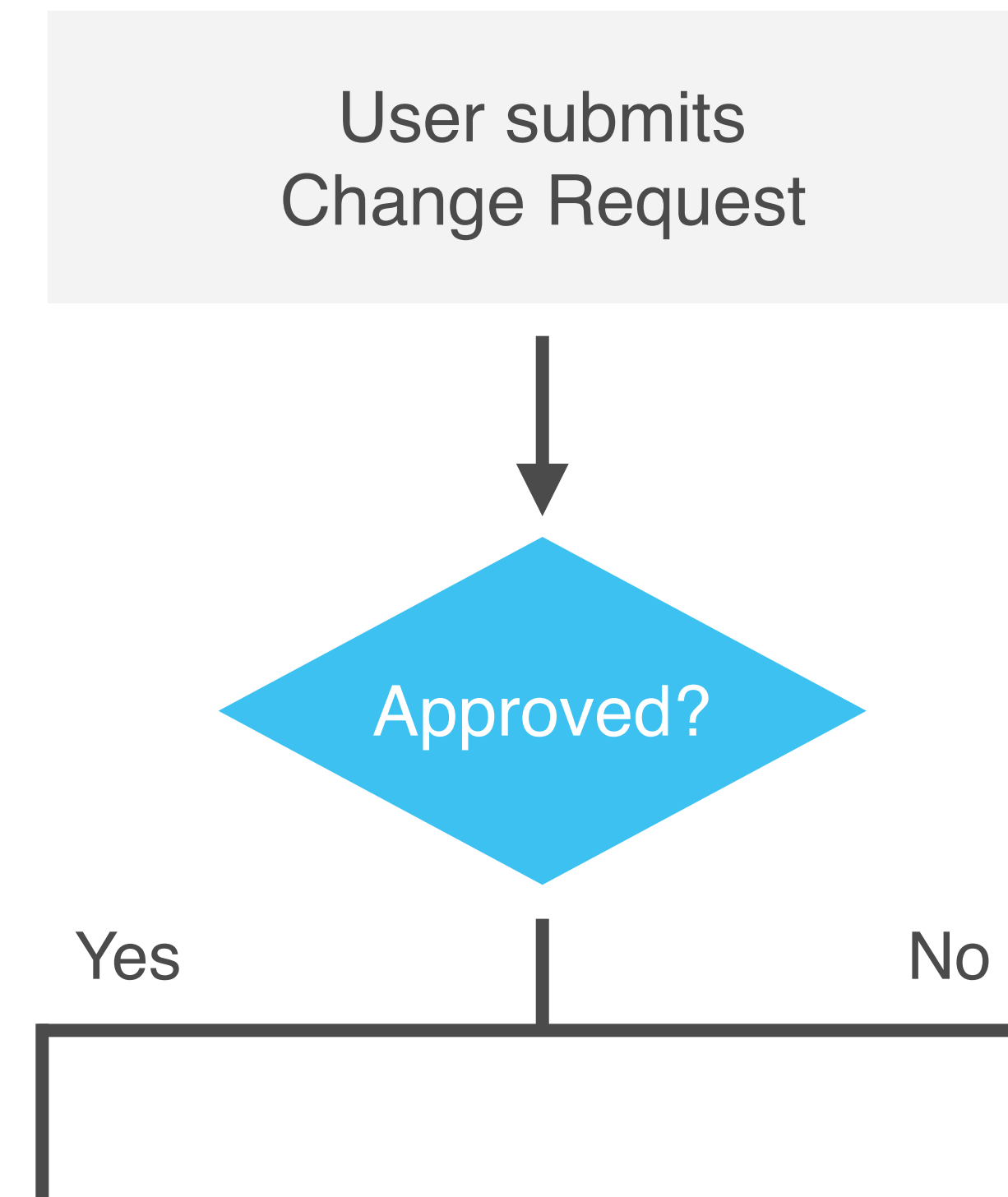
Demo



Workflows

in ServiceNow

- Visual representation of defined process
- Number of activities
 - Approvals, Conditions, Notifications, Timers, Tasks, Utilities, more...



Workflows

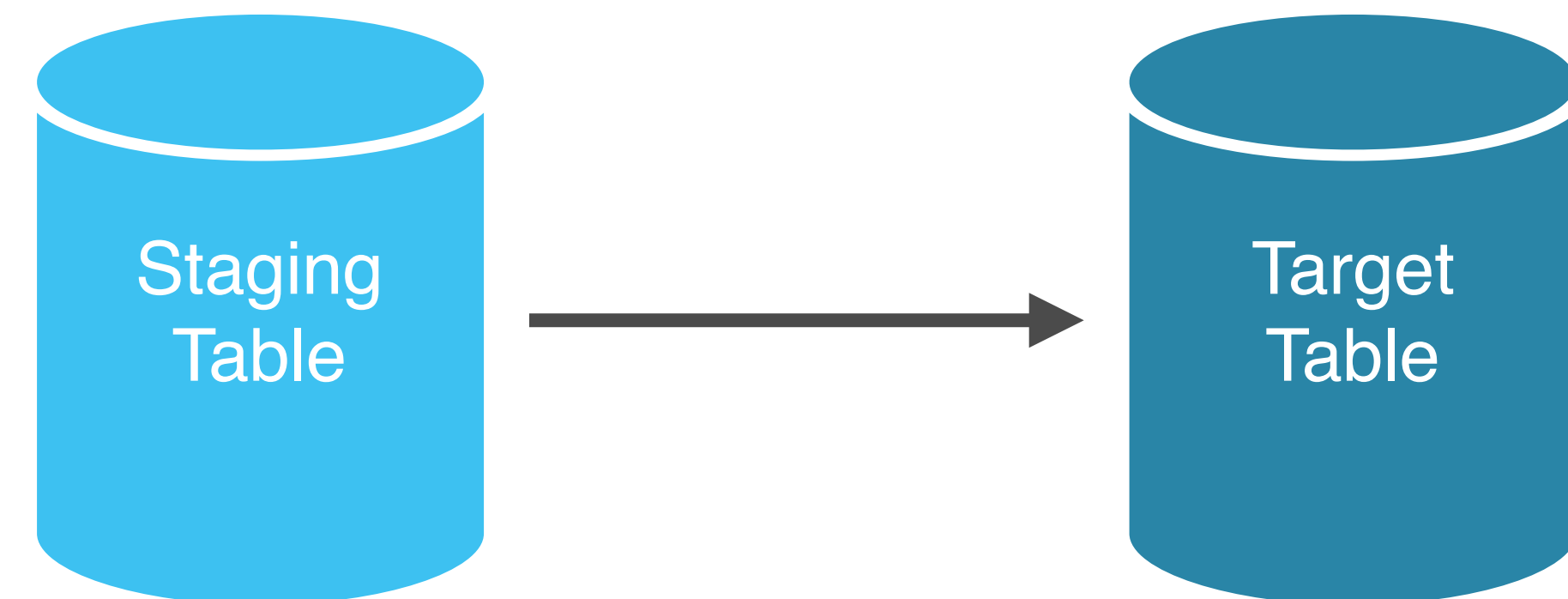
Demo



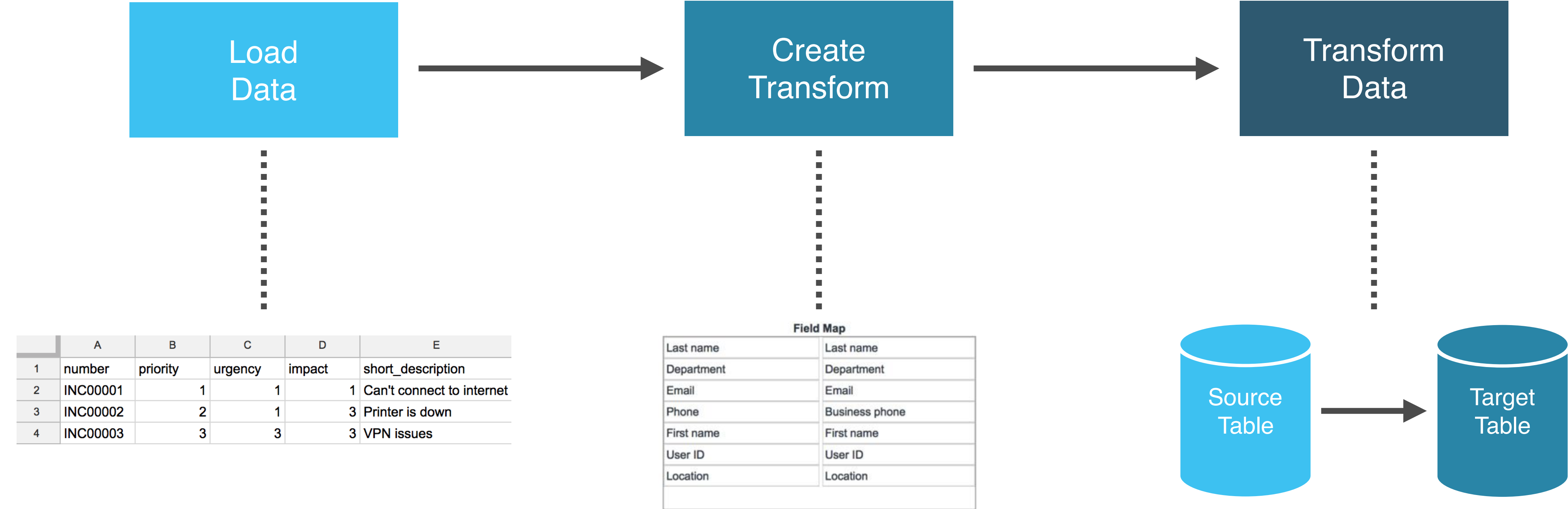
Import Sets

in ServiceNow

- Import data
- Powerful & flexible
- Data sources
 - Database connectors, web services, CSV, XML, Excel, FTP
- Transform mapping



Import Process



Import Sets

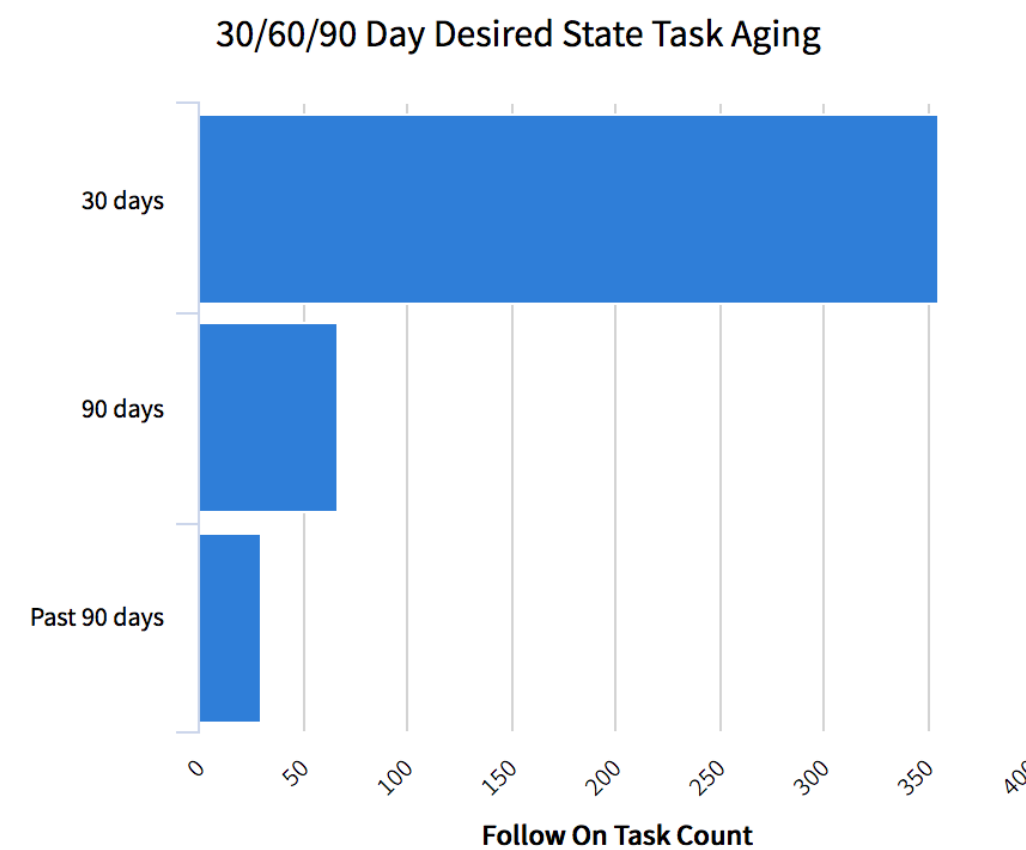
Demo



Reporting

in ServiceNow

- Many different types
- Roles
- Create & share reports
- Schedule reports



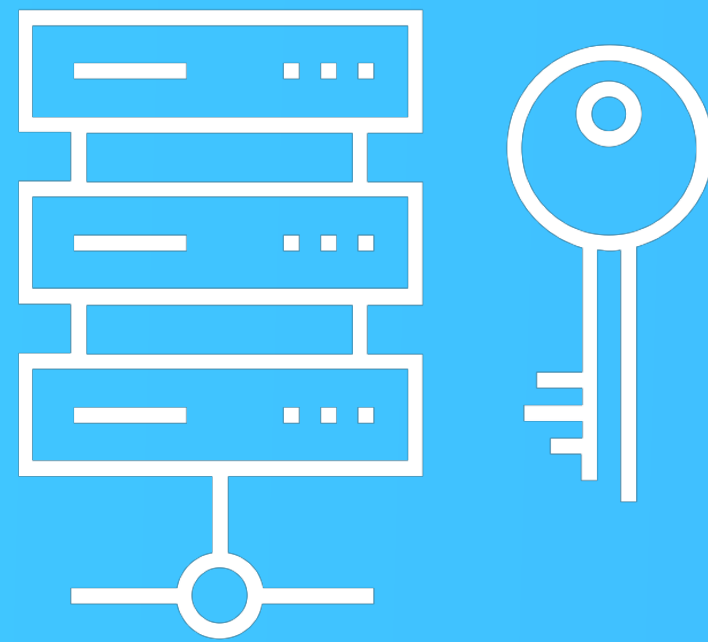
☆	Type	↓ Title	Table
✎ ☆ 30 1 2		API Usage (Monthly)	API Transactions Stats [sys_api_stats]
✎ ☆		API Usage by Method (Daily)	API Transactions Stats [sys_api_stats]
✎ ☆		API Usage by Resource (Daily)	API Transactions Stats [sys_api_stats]
✎ ☆		API Usage by Resource (Last 30 Days)	API Transactions Stats [sys_api_stats]
✎ ☆		API Usage by Type (Daily)	API Transactions Stats [sys_api_stats]
✎ ☆ 30 1 2		API Usage by Type (Monthly)	API Transactions Stats [sys_api_stats]

Reporting

Demo

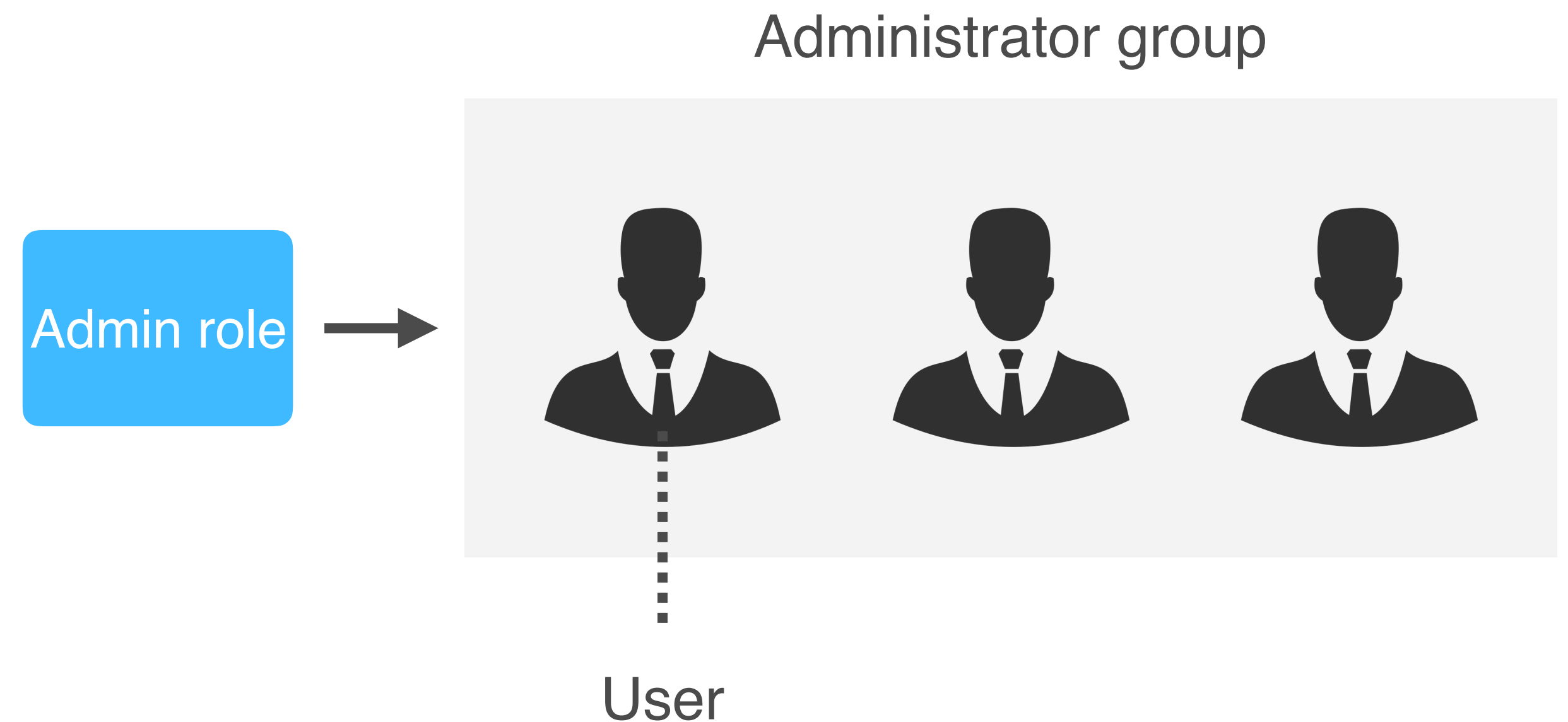
Demo





Roles

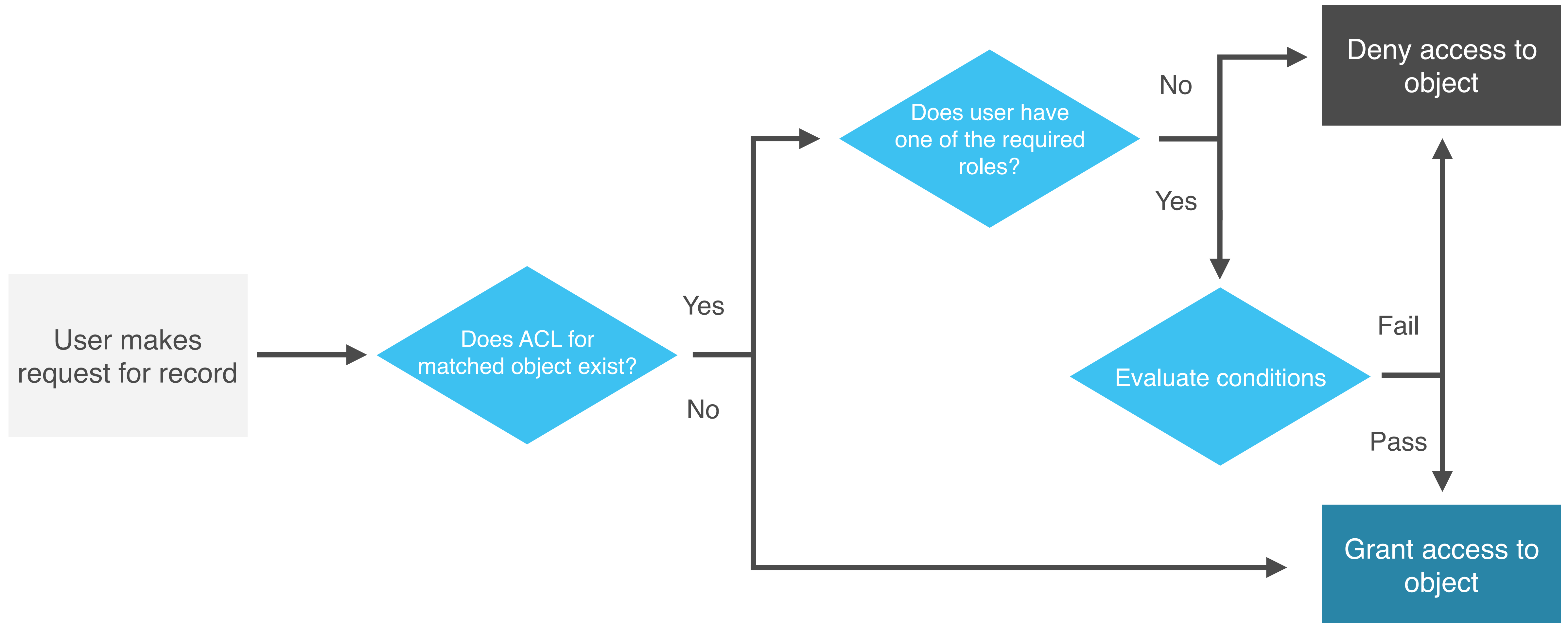
- Grants permissions to parts of the system
- A record in the sys_user_role table
- Assign 1 or more roles to a group
- Contain 0 or more access control rules
- Many out-of-box roles



Access Operations

Operation	Action
execute	Run app or script
create	Insert records
read	Display records
write	Update records
delete	Remove records
list_edit	Update records from list view
report_on	Create reports

Access Controls Flowchart





Upgrades

in ServiceNow