knowledge14®

April 27–May 1, 2014 • Moscone Center • San Francisco, CA

Reporting 301:

Database Views, Metrics, and Custom Charts

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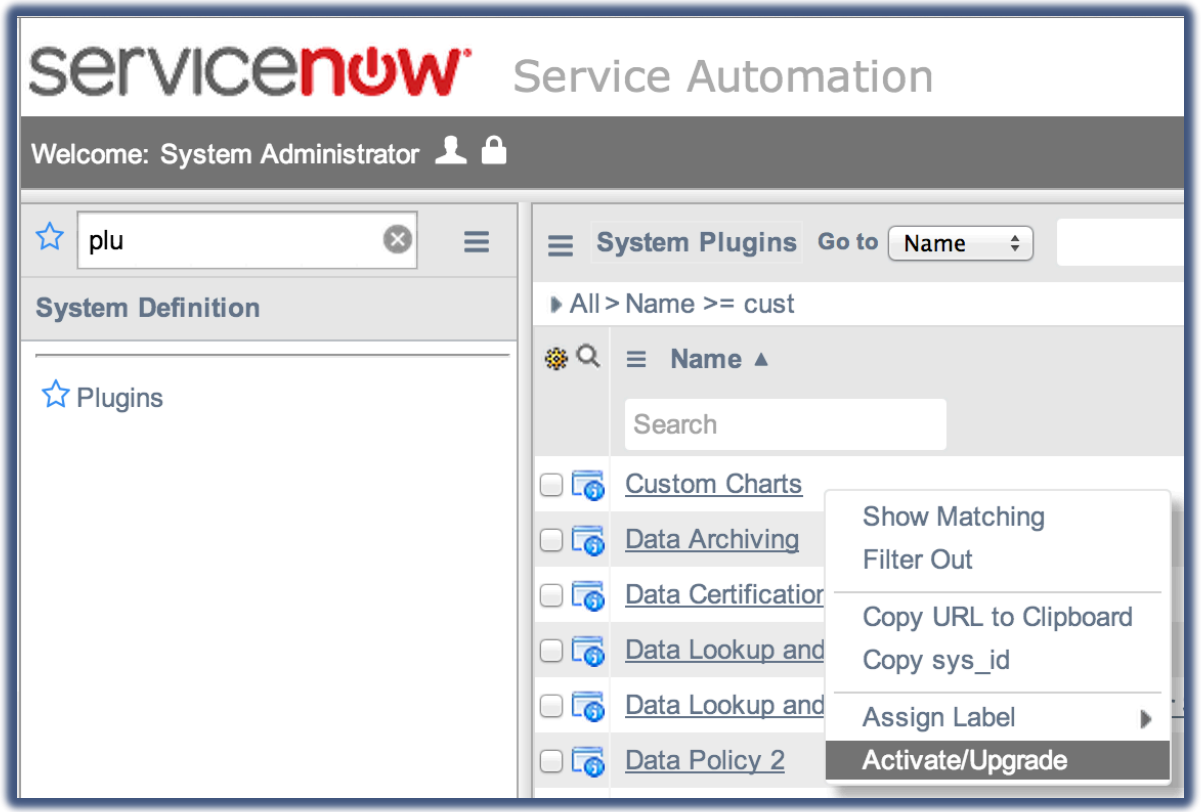
Agenda

- Before We Begin – some generic useful Stuff
- Sections
  - Gauge Counts
  - Reporting Security – who can see what?
  - Trend Data – long term information
  - Metrics – Changing priorities
  - Views – Monitoring SLAs
  - Custom Charts Introduction
- Bringing it all together
- Additional Resources

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Before you begin - 1

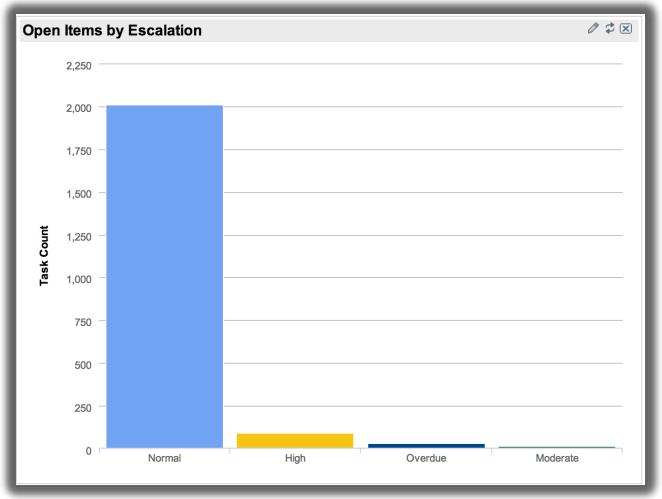
- Enable the Custom Charts plugin in your instance.
- System Definitions -> Plugins



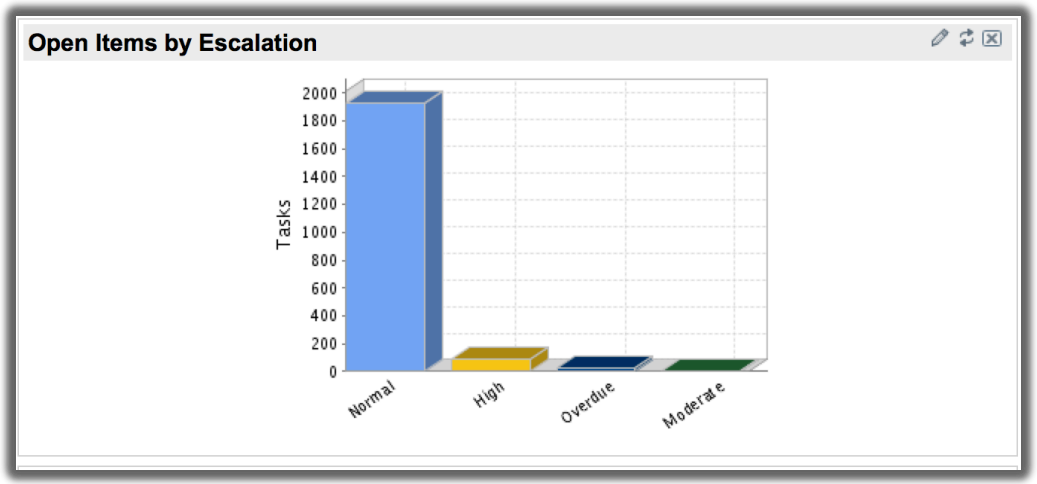
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Before you begin – New in the past year or so…

- Dublin
  - Enhanced Charting Engine
  - Legendary Control
  - 4 new system properties
  - More descriptive X and Y axes
  - Display percentages choice



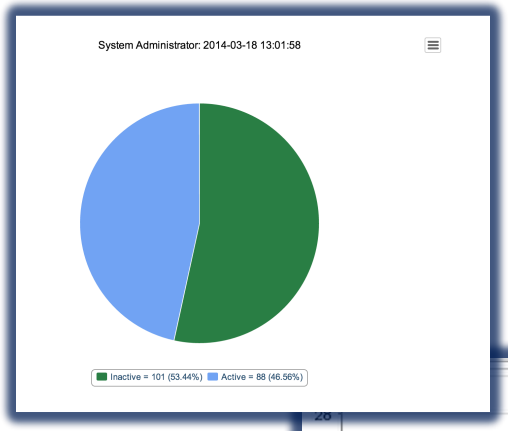
- Calgary
  - Header and Footer
  - Compare field values
  - Export directly to PDF
  - Share with multiple users or groups
  - Tiny charts



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Before you begin

- Simple reports are simple
  - Every list is a report
- Complex reports are simple-ish
  - Know what you want
  - Support your objectives
  - Understand common solutions
- If all else fails:
  - Extract!
  - IT Performance Analytics!





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Listing all reports

- List multiple reports
  - Then edit them
  - Report on reports
- Reports >
  - View/run > Administration -- or -- Edit

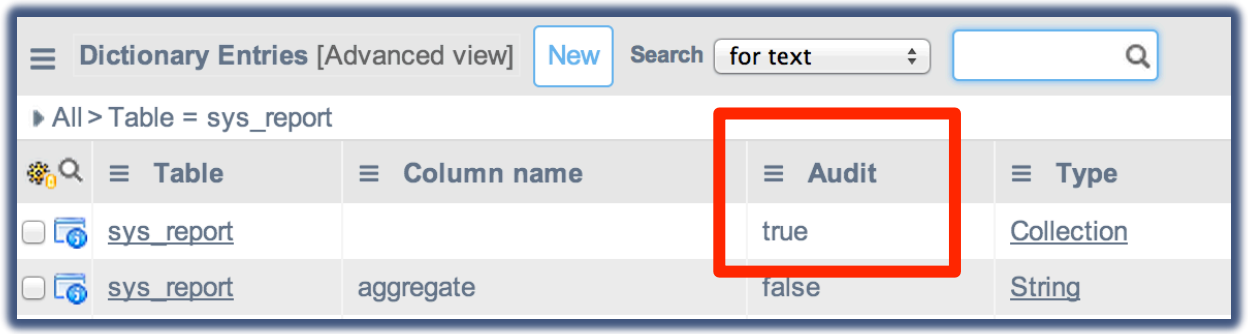


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Change history

- Audit the report record
  - See who changed what and when

In the dictionary record, tick the audit checkbox



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Chart colours

- Assign a colour to each field or metric
  - Reports > Chart Colors
  - SLAs have green for achieved, red for breached
- Use corporate colours
  - Reports > Color definitions
  - Give names to often used colours

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Exercises

- Gauge Counts
- Reporting security – who can see what?
- Trend data – long term information
- Metrics – changing priorities
- Views – monitoring SLAs
- The big picture – putting it all together

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Labs log in

- Login to your lab
- Ensure you are the administrator
  - Username: admin
  - Password: Knowledge14

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Exercise 1 – gauge counts

- Goal
  - Capture key incident counts
- Method
  - Create a gauge counter
  - Add it to your homepage
- Steps
  - Listed in exercise 1

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Controlling access

- Specifying who the report is ‘visible to’ selects who can view the report
  - Choose from me, everyone, group
  - Can also select roles in ‘administration’ view
- Applying ACLs on the table restricts who can view the data
  - What tables they see in the report interface
  - What results are displayed to the user

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Exercise 2 – security rules

- Goal
  - Show the right data to the right people
- Method
  - Create access control rules
  - See the difference it makes
- Steps
  - Listed in exercise 2

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Trend data

- Grabs a snapshot
  - Set a count criteria
    - Number of active incidents
    - Captured every hour/day
  - Captures data about generation
    - Day of week
    - Day of month
    - Month
    - Year, etc.

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Exercise 3 – trend data

- Goal
  - Look at task statistics over time
- Method
  - Activate the trend data module
  - Create sample reports
- Steps
  - Listed in exercise 3

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Database views

- Joins two tables together
  - Reduces the need for ‘dot-walking’
  - Flattens data for easier reporting
  - Left join is available
- Reduce complexity
  - Specify which fields should be available

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Exercise 4 – database views

- Goal
  - Analyse problem and problem SLAs together
- Method
  - Create a database view that joins two tables together
  - Build a report that runs off this table
- Steps
  - Listed in exercise 4

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Metrics

- Generate KPIs
  - How long was an incident open for?
  - How many people worked on this problem?
  - Who takes a long time approving tasks?
- Information about one record, one field
  - Generate via script or a duration
- Reduces need for calculated fields

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Exercise 5 – metrics

- Goal
  - Count when priority changes
- Method
  - Create a metric that will capture when this happens
  - Build a report that shows the counts
- Steps
  - Listed in exercise 5

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Custom charts

- Build your own chart
  - Use JavaScript with JFreeChart
  - Custom data source
    - Uses summary sets
    - Get data from external sources
    - Manipulate data in ServiceNow
  - Custom presentation
    - Combine chart types
    - Overlay, reorder

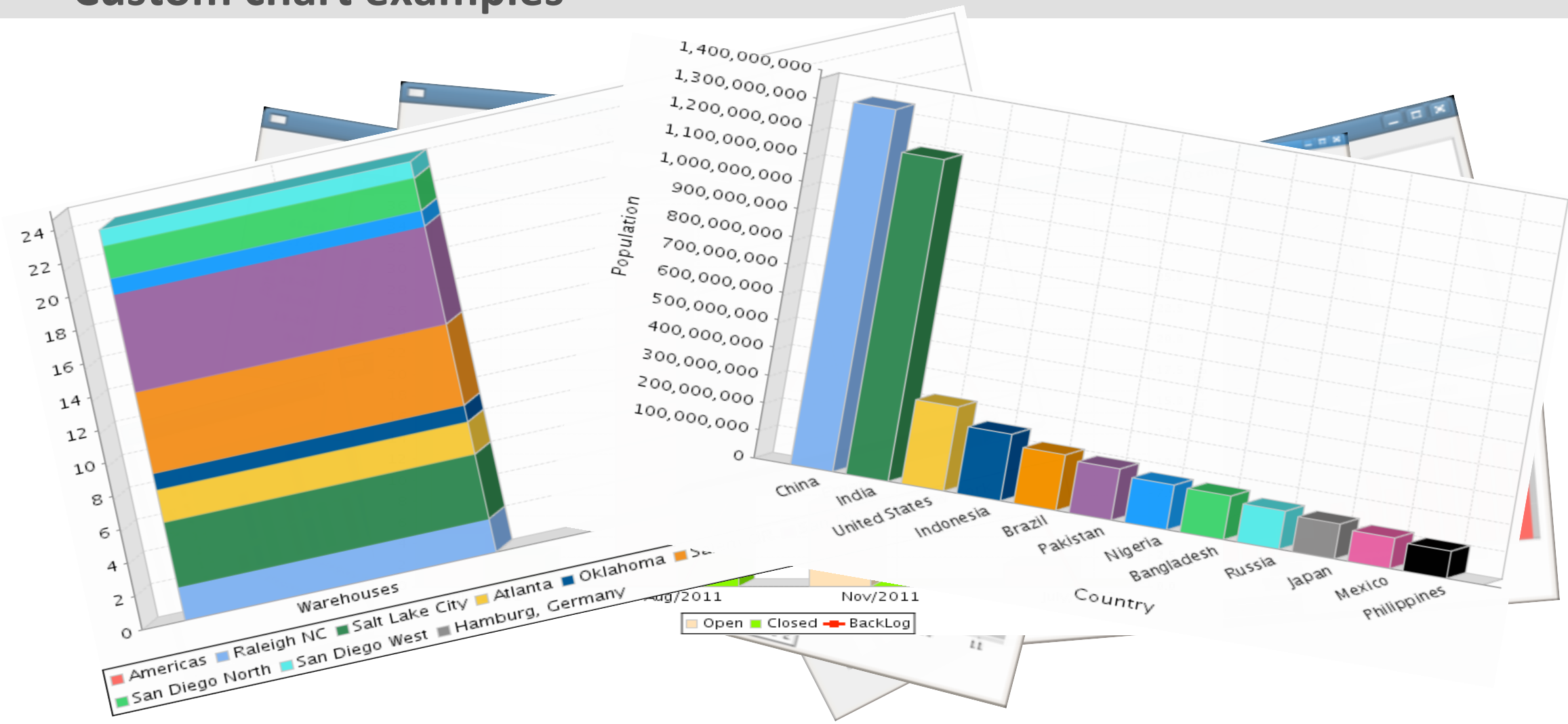
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Summary sets

- Temporary table
  - All report data gets stored here
  - Purged periodically
    - Kept for an hour by default
- Separates data from presentation
  - Do reports of reports?
  - Can be populated by us too
    - Script Includes helps us do this

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Custom chart examples



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Exercise 6 – building a homepage

- Goal
  - Give an overview of key data
- Method
  - Build charts, counts and lists
  - Add them to the homepage
- Steps
  - Listed in exercise 6

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Exercise 6 – Script Snippet

- KB0010001 in your lab instance
- Use Global search or look in the ‘General’ category of the Knowledge Base

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Reporting Performance

- Each homepage consists of lots of reports
  - The first page every one sees
  - Refreshes often
- Slowing you down?
  - Check your refresh rates
  - Sensible queries
  - Enable aggressive caching
  - Limit the number of reports
  - Understand list grouping

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Using ODBC

- Use an external report tool
  - Use dedicate tool to merge information
  - Join data from ServiceNow to other systems
  - Use a system you are already comfortable with
    - Excel included!

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Charts without reports

- Build your own chart
  - Using just a URL
    - Maybe auto-generate it?

https://demo.service-now.com/sys_report_template.do?
sysparm_table=**incident**&sysparm_field=**category**&
sysparm_query=**active=true**&sysparm_type=**pie**&
sysparm_from_list=true&sysparm_chart_size=large&
sysparm_manual_labor=true

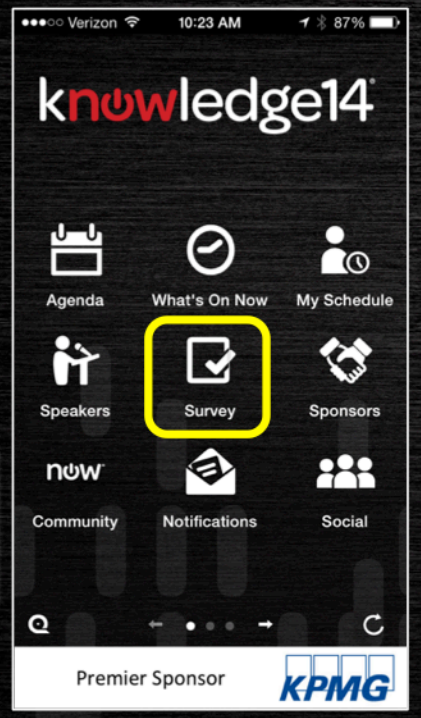
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Thank You

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