knowledge14®

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Reporting 101:
Basic Reporting with a Side of Metrics

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Agenda

Reporting is more than just ‘Reports’

Out of the Box reporting

Creating Easy Reports

Creating Advanced Reports

A Side of Metrics

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Agenda

Share the Wealth

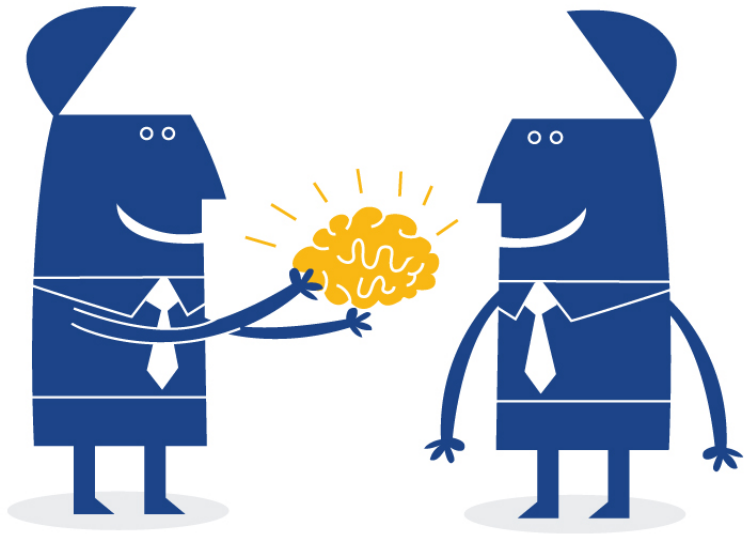
Takeaways

Q & A

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Overview

- **What you'll need for this Lab:**
  - Basic knowledge of ServiceNow platform operations
  - Basic understanding of ServiceNow tables and fields
- **You will leave with a working knowledge of:**
  - Basic reporting capabilities
  - Out of the box reports
  - Ability to generate and distribute reports in ServiceNow



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Reporting is more than just ‘Reports’

Presenting information without publishing a report

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Reporting is more than just ‘Reports’

- Reporting functionality can be achieved via filtered lists
  - Same condition builder/filtering available
  - Can be saved for self, group, global
  - Capture breadcrumb trail
  - Can be presented in modules
- Dublin additions…
  - Enhanced charting engine renders charts on the client, making charting faster
  - Interactive legends on charting v2 plugin
  - Color control for charts (glide.ui.chart.use_full_color_palette)

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Reporting is more than just ‘Reports’

Lab 1

- Create a list filter on the Incident table to show:
  - Priority 1 records
  - Created this year
  - State is new

- Lab Challenge: Use the list filter and create a personal filter



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Out of the Box Reporting

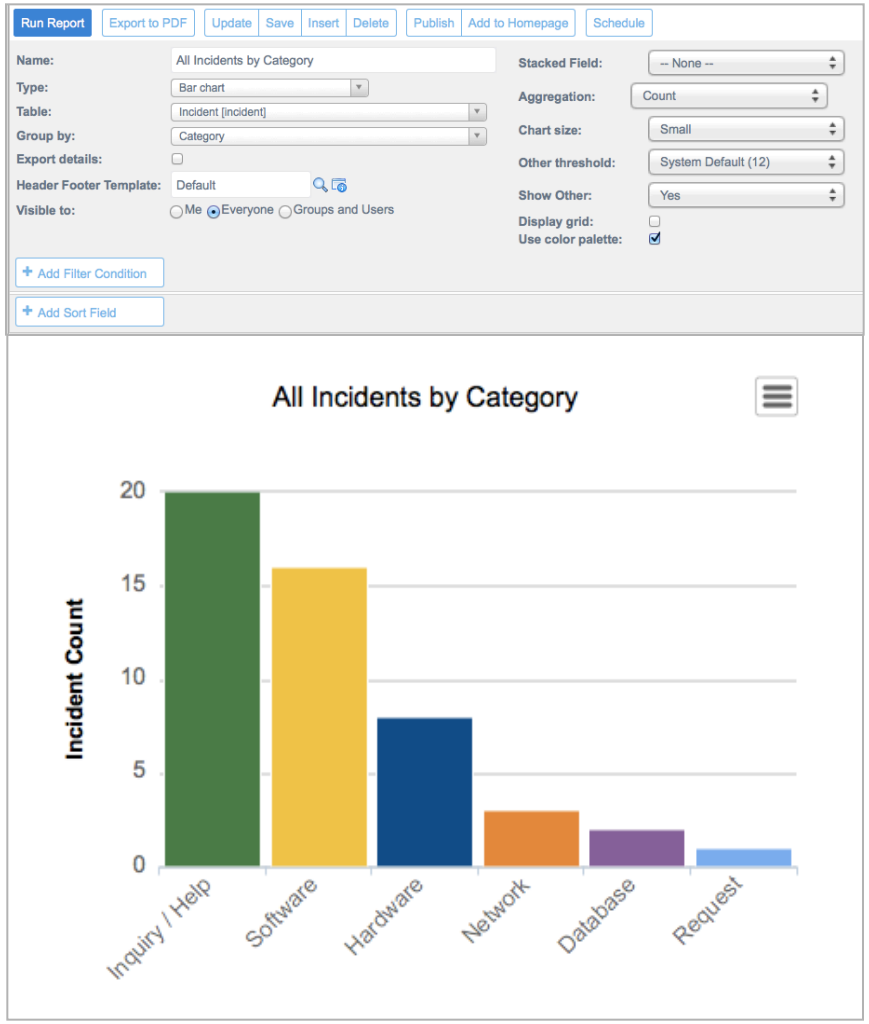
Knowing the tools in the toolbox

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Out of the Box Reporting

Anatomy of a Report

- Report Type
- Table
- Security
- Stacked Field
- Aggregation
- Chart size
- Grid
- Filter



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Out of the Box Reporting

Lab 2

- Modify existing ‘All Incidents by Assignment’ report to have different filtering
  - Modify the report to filter on Active = True
  - Add another filter to limit report to people in the ‘Sales’ department (NOTE: dot walking is required here)

- Modify existing ‘Active Change Requests’ to have different filtering and columns
  - Group by ‘state’
  - Filter to records where assigned to is empty
  - Include fields: Number, Assignment Group, Short Description, Approval



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Creating Some Easy Reports

The proof is in the presentation

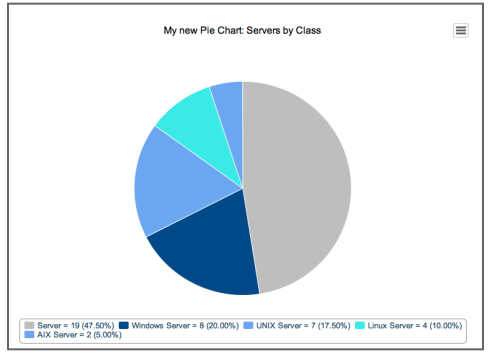
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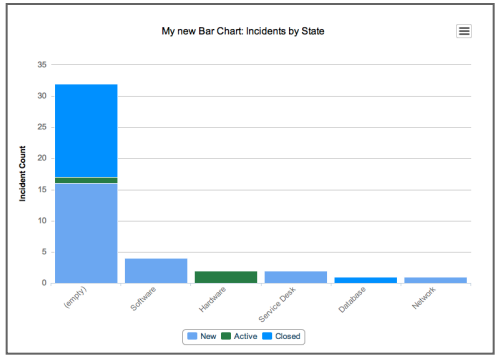
Creating Some Easy Reports

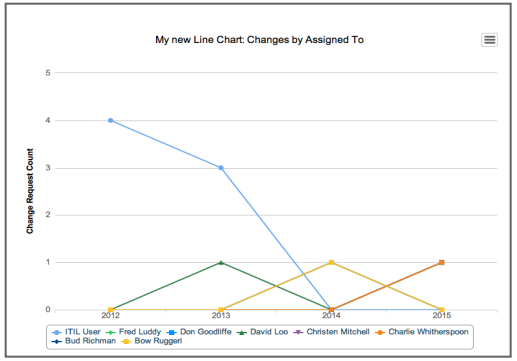
Basic Report Types

- List
- Pie Chart
- Bar Chart
- Line Chart









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Creating Some Easy Reports

Lab 3: Create a List Chart

- Create list report on ‘Approval’ table
- Group by Approver
- Include fields: State, Approver, Comments, Approval For, Created
- Lab Challenge: Add Assignment Group field to the list report

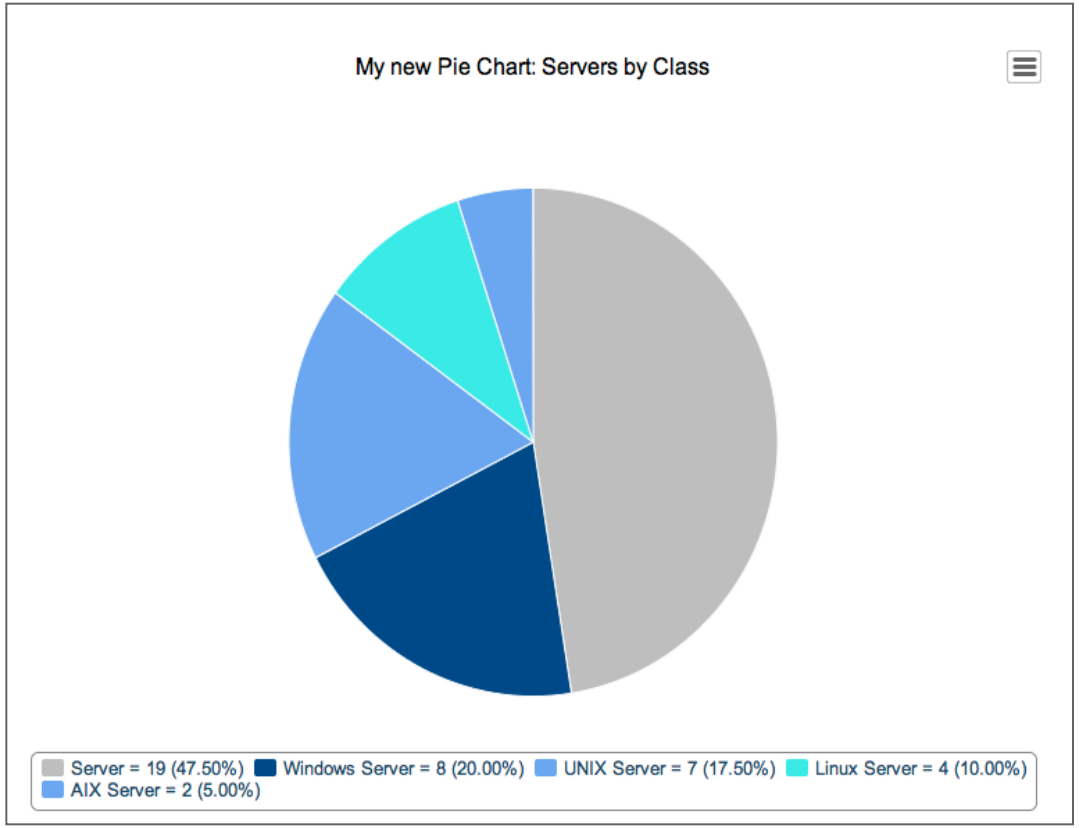


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Creating Some Easy Reports

Lab 4: Create a Pie Chart

- Challenge 1: Create a pie chart that gives the distribution of CI classes
  - Configuration Item table (cmdb_ci)
  - Display the grid
  - Group by Class
- Challenge 2: Change the table to be servers only (server table)
  - Deselect ‘server’ class from report legend
    - Watch what happens to the bar chart output

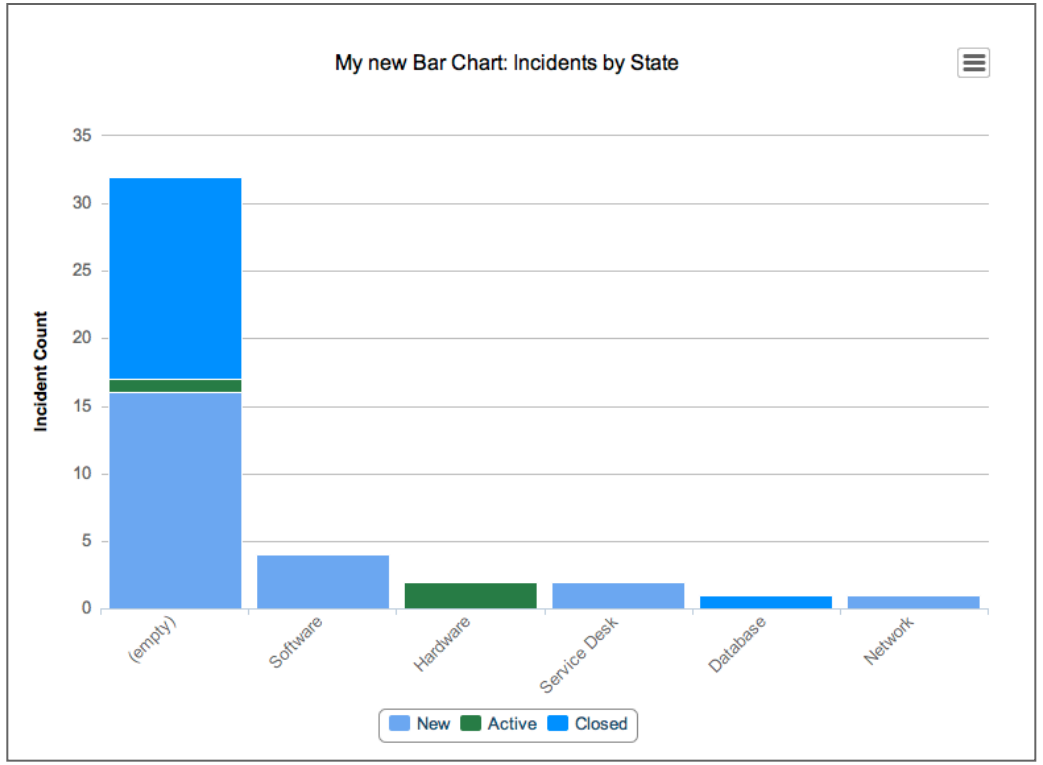


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Creating Some Easy Reports

Lab 5: Create a Bar Chart

- Create a bar chart showing incidents assigned to groups for the last 12 months, by incident state
  - Select Incident table
  - Group by Assignment Group
  - Stacked Field by State
  - Filter condition
    - Created on ‘last 12 months’



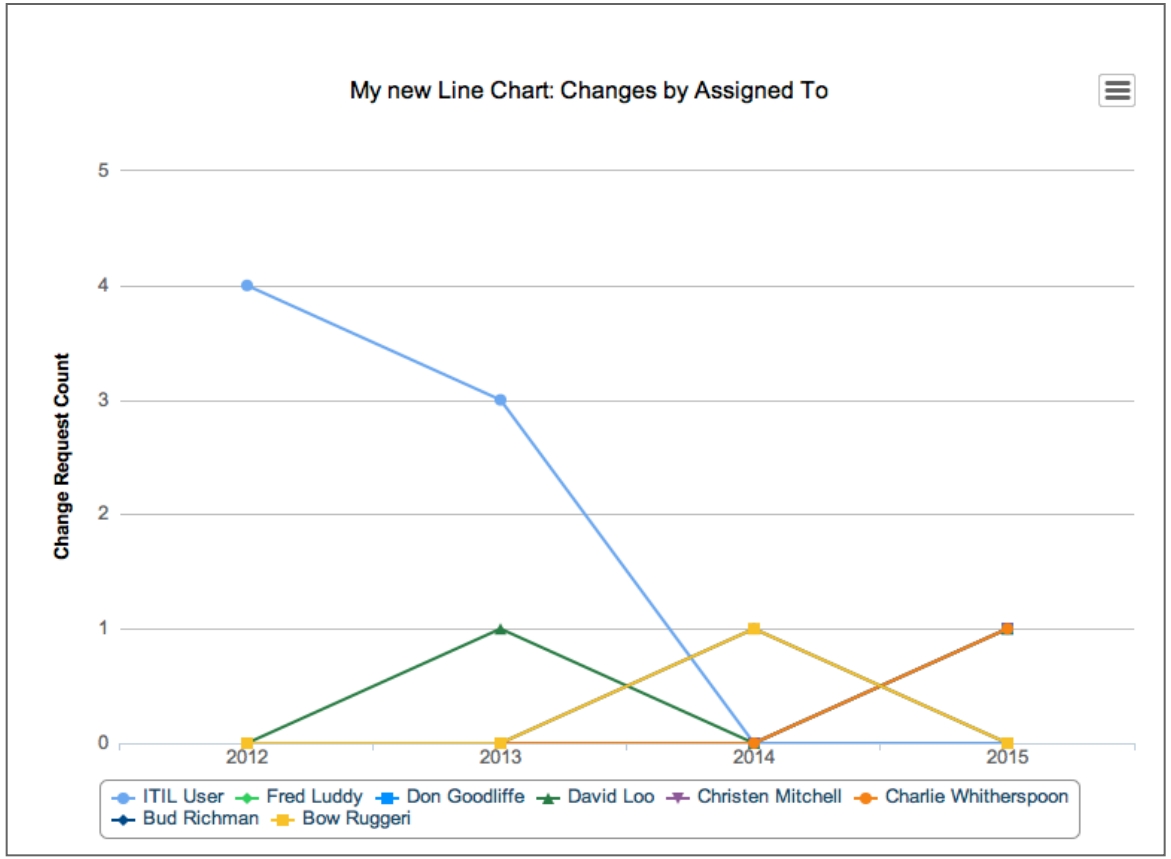
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Creating Some Easy Reports

Lab 6: Create a Line Chart

- Challenge 1: Create a line chart showing a yearly trend line of which Assignment Groups were assigned Change Requests
  - Change Request table
  - Group by Assignment
  - Trend by Created per Year

- Challenge 2: Change the group by field to ‘requestor’
  - Run the report
  - Question: Who requested the most changes?
  - Question: What year were the most changes requested in?



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Creating Advanced Reports

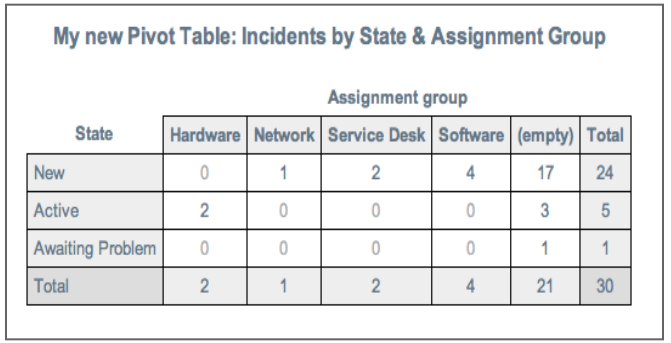
Slicing and Dicing the data

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Creating Advanced Reports

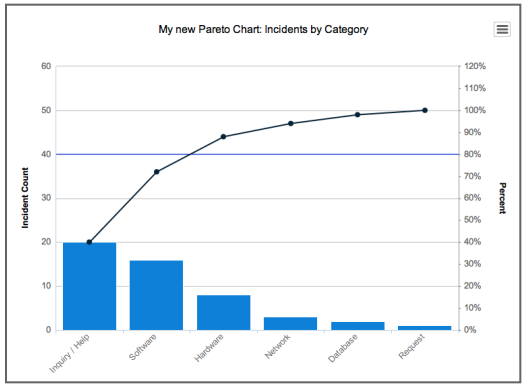
Advanced Report Types

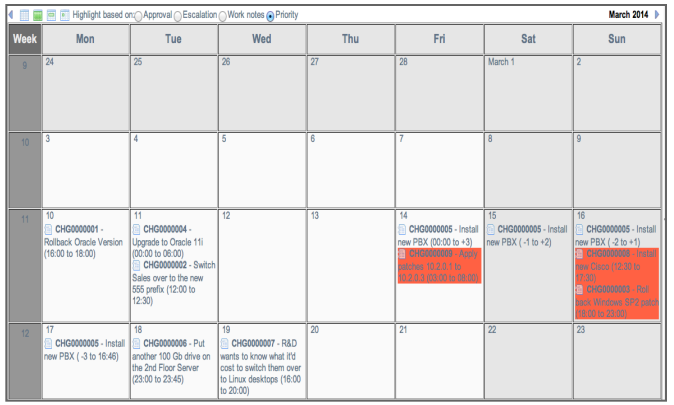
- Pivot Table
- Pareto Chart
- Calendar
- Trend Chart

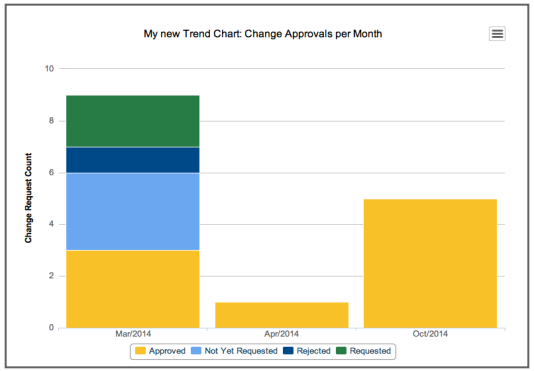


Assignment group

State	Hardware	Network	Service Desk	Software	(empty)	Total
New	0	1	2	4	17	24
Active	2	0	0	0	3	5
Awaiting Problem	0	0	0	0	1	1
Total	2	1	2	4	21	30







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Creating Advanced Reports

Lab 7: Create a Pivot Table

- Create a pivot table that displays a count of incidents by assignment group and incident state, excluding Incidents in 'closed' state
  - Incident Table
  - Type is Pivot Table
  - Row is Assignment Group
  - Column is State
  - Filter condition
    - State is not Closed

My new Pivot Table: Incidents by State & Assignment Group

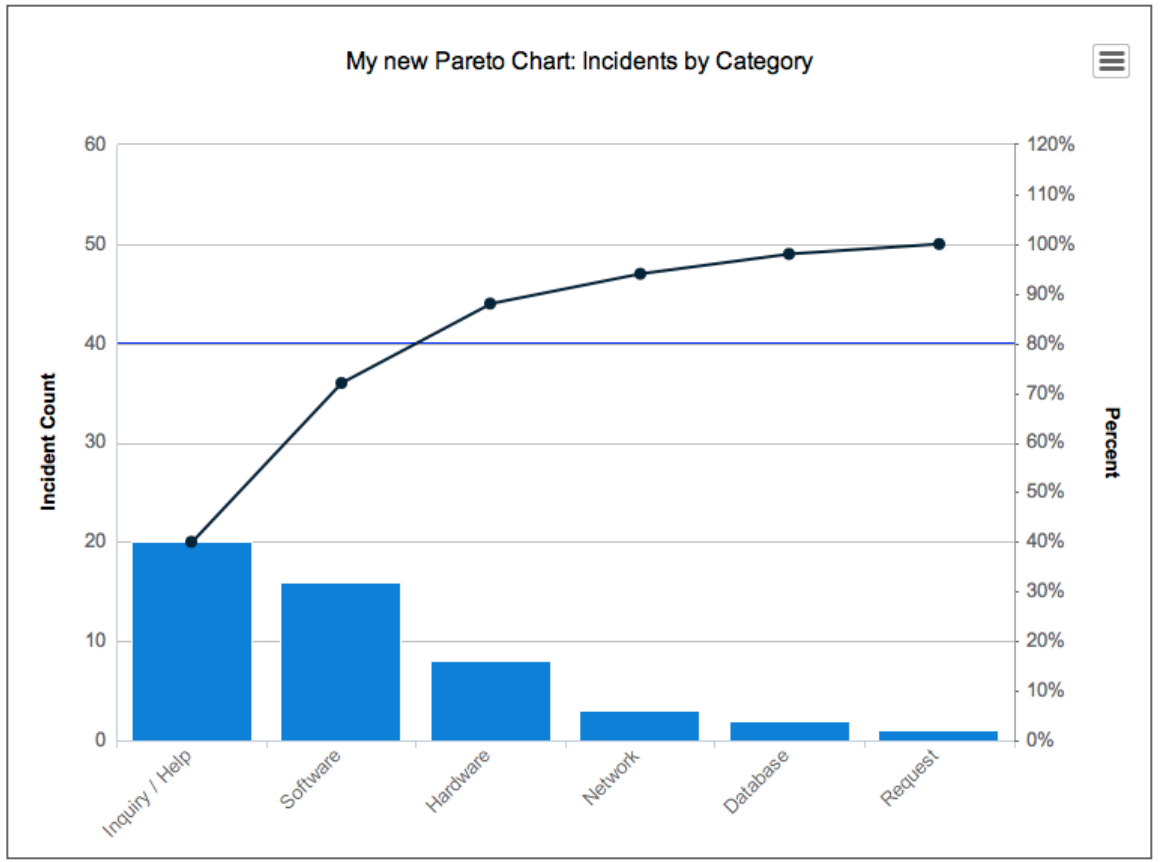
	Assignment group					
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Awaiting Problem	0	0	0	0	1	1
Total	2	1	2	4	21	30

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Creating Advanced Reports

Lab 8: Create a Pareto Chart

- Create a Pareto chart that displays the breakdown of incidents by category
  - Incident Table
  - Type is Pareto Chart
  - Group by Category



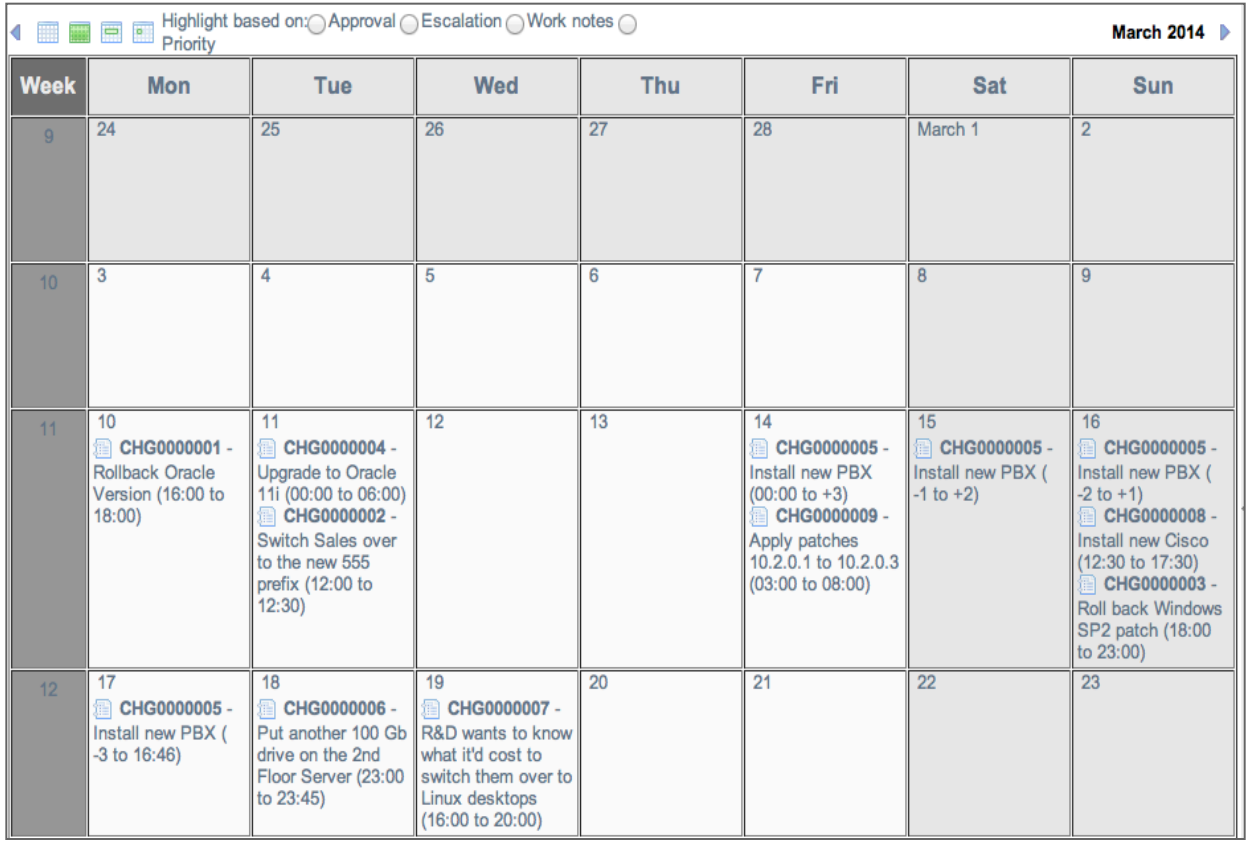
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Creating Advanced Reports

Lab 9: Create a Calendar

- Create a calendar that shows all upcoming changes
  - Change Request table
  - Calendar Field is Planned Start Date

- Lab Challenge: Add some color!



Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun
9	24	25	26	27	28	March 1	2
10	3	4	5	6	7	8	9
11	10 **CHG0000001** - Rollback Oracle Version (16:00 to 18:00)	11 **CHG0000004** - Upgrade to Oracle 11i (00:00 to 06:00) **CHG0000002** - Switch Sales over to the new 555 prefix (12:00 to 12:30)	12	13	14 **CHG0000005** - Install new PBX (00:00 to +3) **CHG0000009** - Apply patches 10.2.0.1 to 10.2.0.3 (03:00 to 08:00)	15 **CHG0000005** - Install new PBX (-1 to +2)	16 **CHG0000005** - Install new PBX (-2 to +1) **CHG0000008** - Install new Cisco (12:30 to 17:30) **CHG0000003** - Roll back Windows SP2 patch (18:00 to 23:00)
12	17 **CHG0000005** - Install new PBX (-3 to 16:46)	18 **CHG0000006** - Put another 100 Gb drive on the 2nd Floor Server (23:00 to 23:45)	19 **CHG0000007** - R&D wants to know what it'd cost to switch them over to Linux desktops (16:00 to 20:00)	20	21	22	23

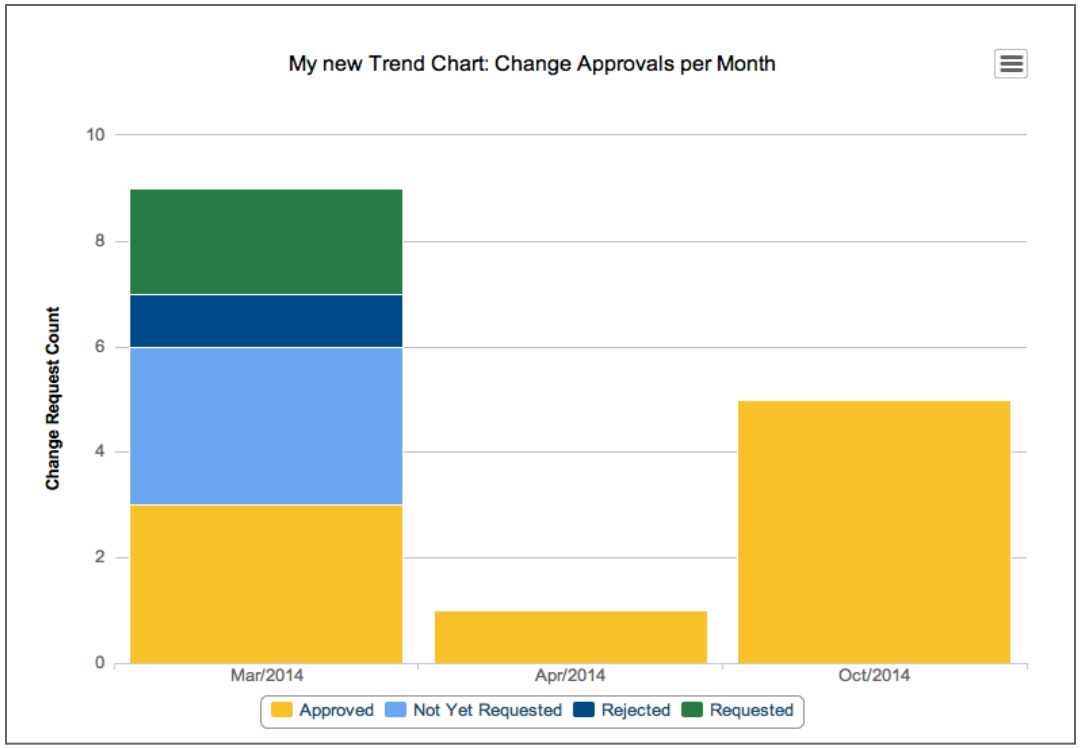
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Creating Reports

Lab 10: Create a Trend Chart

- Create a trend chart of Change Approvals by approval state, per month
  - Change Request table
  - Trend Chart
  - Group by **Approval**
  - Trend Field **Planned start** per **Month**

- Lab Challenge: Trend by created date using Bar Charts



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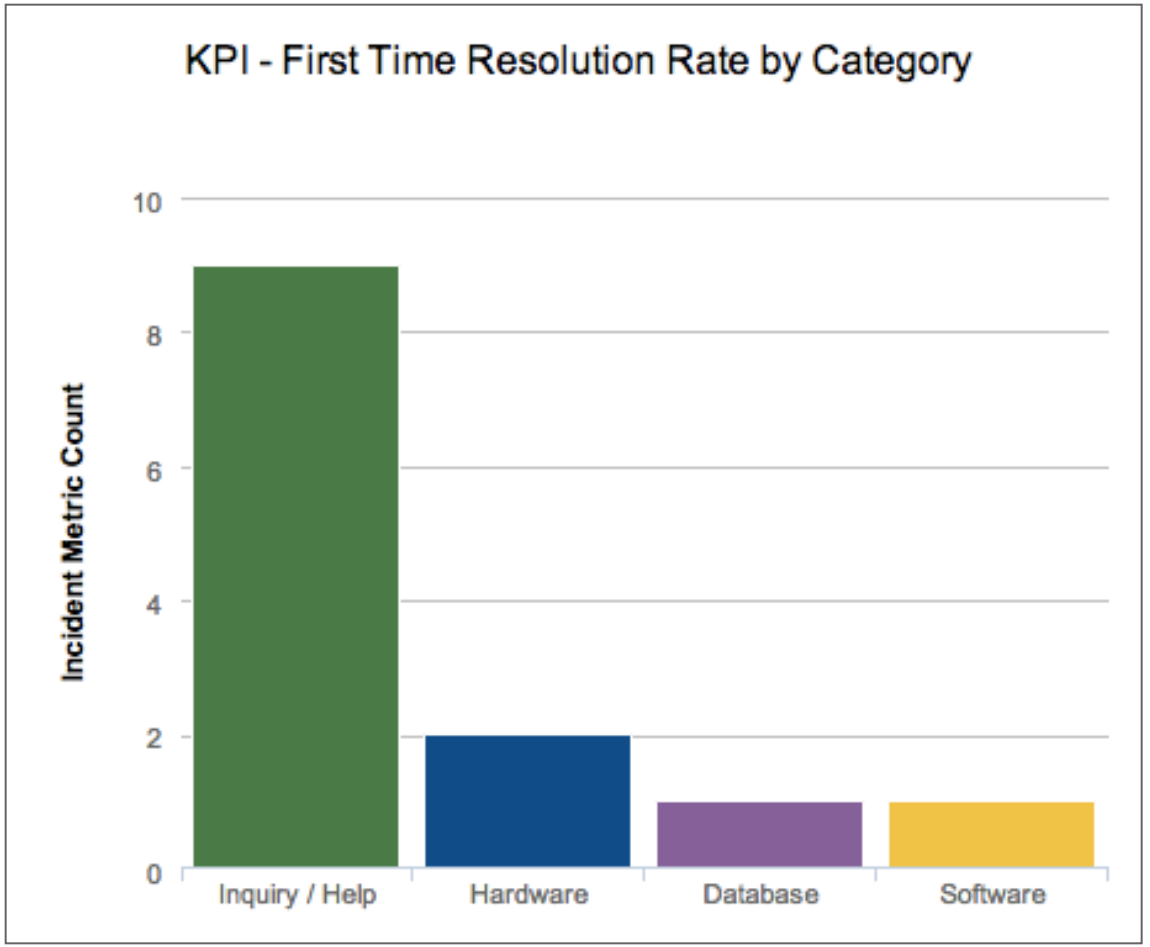
A Side of Metrics…

The power of the platform

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A Side of Metrics…

- Metrics are tracked in separate tables
- Several database views defined (views)
  - More database view/metrics in Reporting 301
- Reporting much the same…
  - Perhaps more dot walking



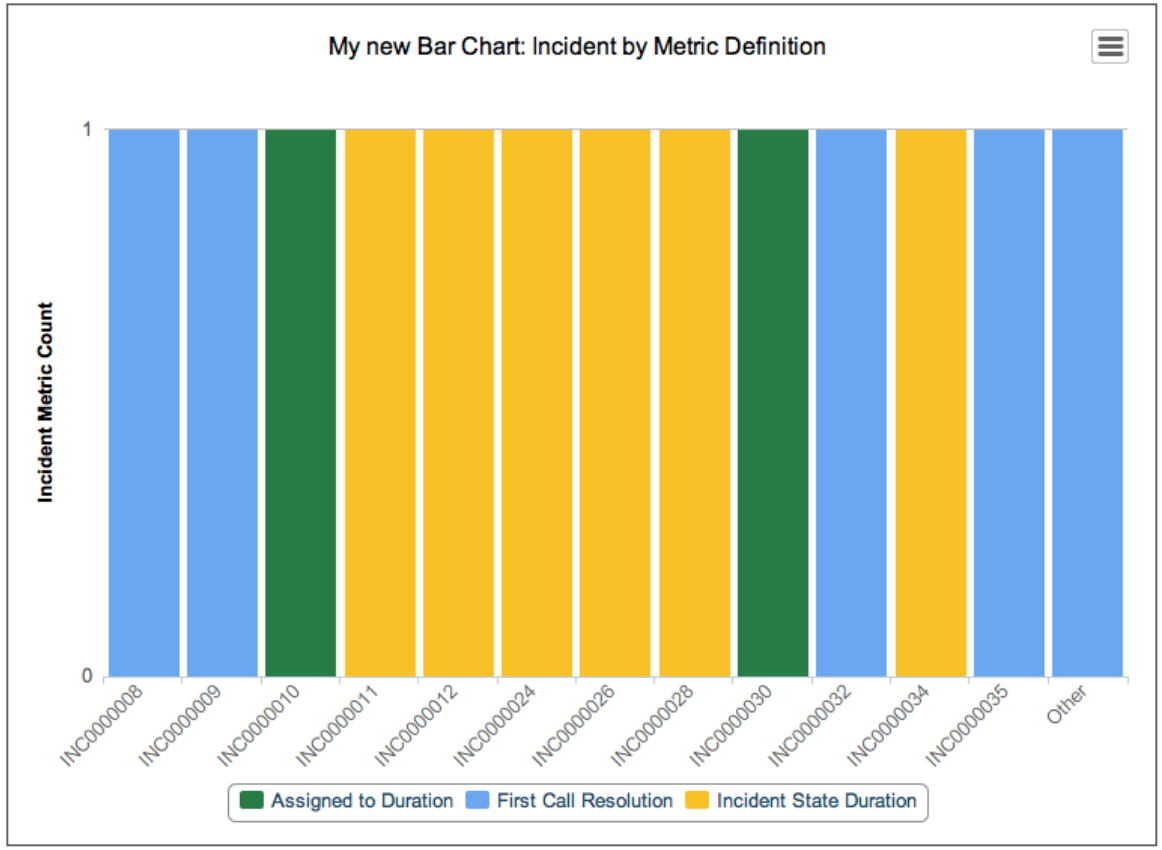
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A Side of Metrics…

Lab 11: Reporting with Metrics

Create a list report of metrics that have been captured for incidents

- **Bar Chart** report
- **Incident Metric** table
- Group by **Number (inc_number)**
- Stacked by **Definition**



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Share the Wealth

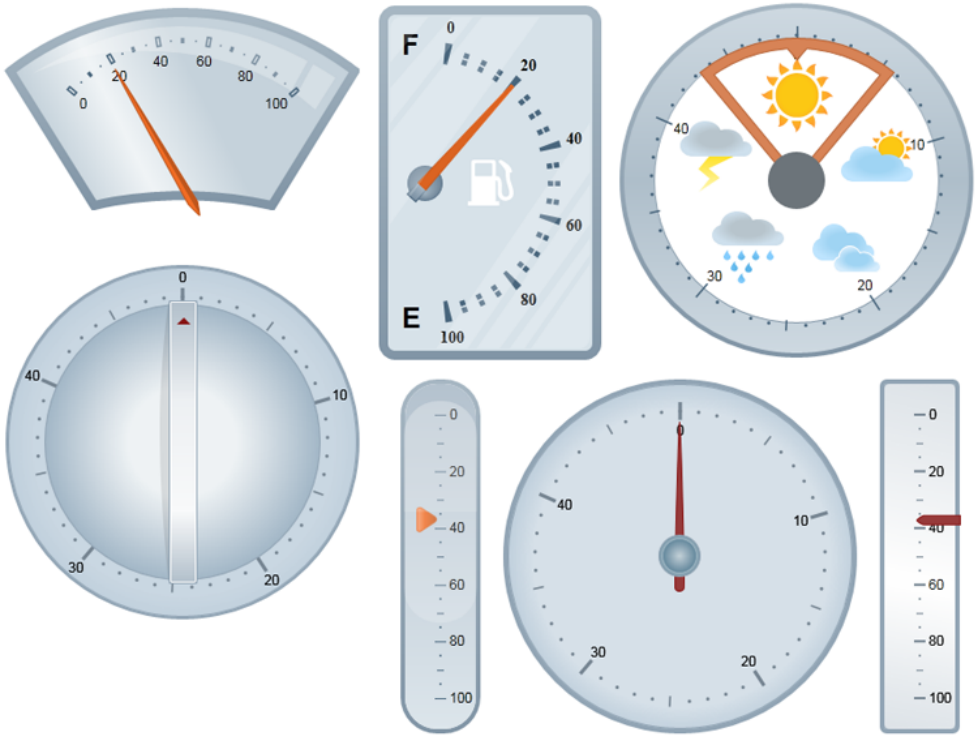
Ways to bring your reports to the people

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Share the Wealth

Homepages

- Reports can be saved as gauges
- Gauges contain live data
- NOTE: users require gauge_maker role to create gauges

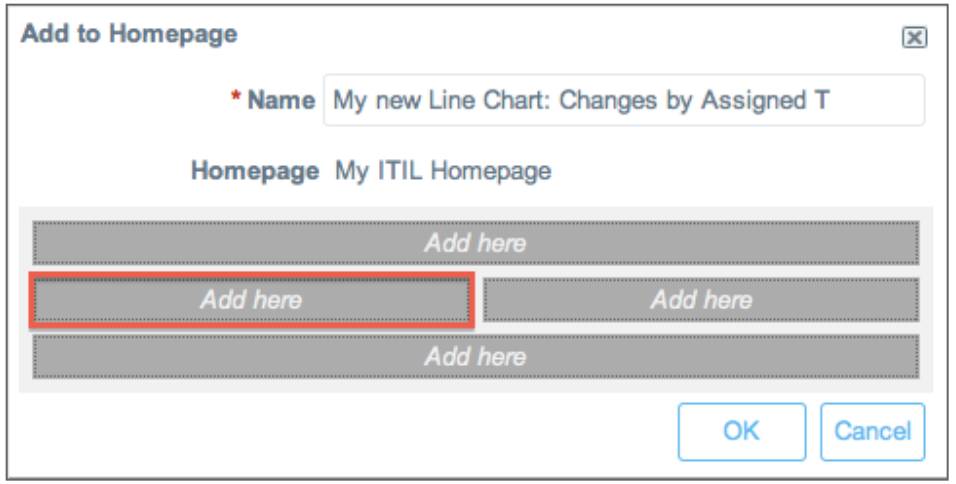


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Share the Wealth

Lab 12: Create a gauge. Present it onto a Homepage

- Create a gauge from one of the reports you created:
  - Bar chart
  - Pareto chart
  - Pivot chart
- Add the gauge to the homepage ‘Incident Overview’



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Share the Wealth

Report Security

- Limit the visibility of a report you create to groups and/or users.



Lab 13: Allow members of the Service Desk group to access a report

- Select report
- Select Groups and Users
- Add Service Desk to Groups
- Save Report

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Share the Wealth

Taking Reports outside of your instance

- Reports can be shared outside of logging into a ServiceNow instance.
- Reports can be distributed via:
  - Export to PDF
  - Schedule
  - Publishing



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Share the Wealth

Lab 14: Publish a report

- Select a report
- Click publish
- Share URL with external audiences

Lab 15: Schedule a report

- Select a report you have created
- Select users, groups, and external email addresses to distribute to
- Select Run Schedule
- Select frequency, format
- Input subject and email message to be sent with scheduled report
- What does the “Run As” field do?



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Top Takeaways

1. Not all reports need to be ‘reports’

2. Out of the Box reports are a great starting point (also serve as good examples)

3. ‘Dot Walking’ allows access to lots of extra data

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Additional Take-aways…

- Reports are of live data
- Reports can be filtered and ordered
- Reports can be exported to an image file from a Homepage
- System security applies to reports as well
- Reports can be distributed automatically

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Useful Links

Base System Reports

- https://wiki.servicenow.com/index.php?title=Base_System_Reports

Generating Reports

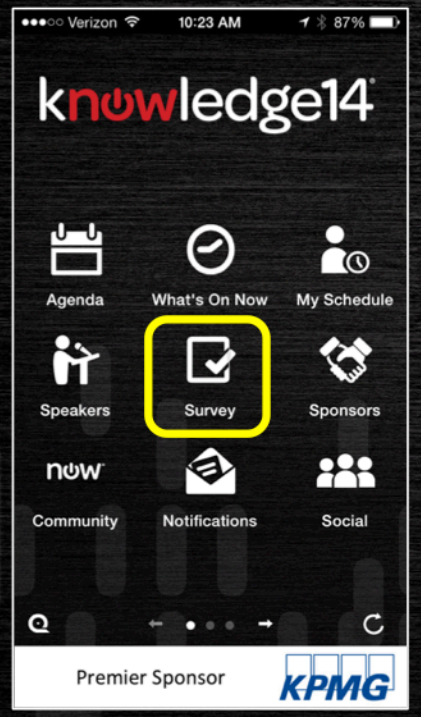
- https://wiki.servicenow.com/index.php?title=Generating_Reports

Report Types

- http://wiki.servicenow.com/index.php?title=Reporting#Report_Types

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