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Team Development

Beyond Update Sets

Michael Hoefer
Director, Cloud Platform Engineering
ServiceNow

Tulio Quinones
Director, SC Solution Architect Practice
ServiceNow

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Agenda

Who This Is For

Parallel Development

Development

Hands-On Lab

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Who This Is For

Got parallel releases? Parallel projects?

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Parallel Releases

- Most customers have short term fixes and longer term releases, but only two or three instances

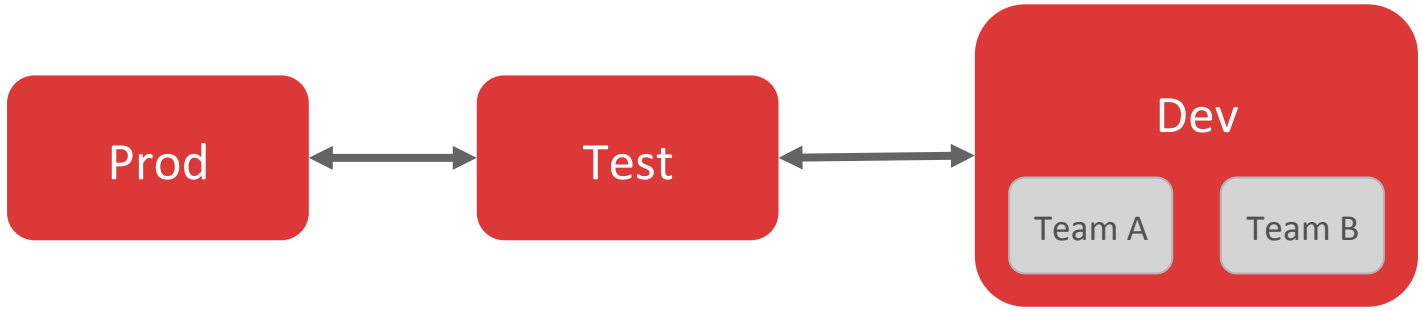


  - If you are renovating a script in a long-term release, but find a critical issue that must be fixed this week, what do you do?
  - If I break rank and fix it directly in Test or Prod, how do I get that change back into Dev?

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Parallel Projects

- Most customers have more than one ServiceNow admin, working on more than one project



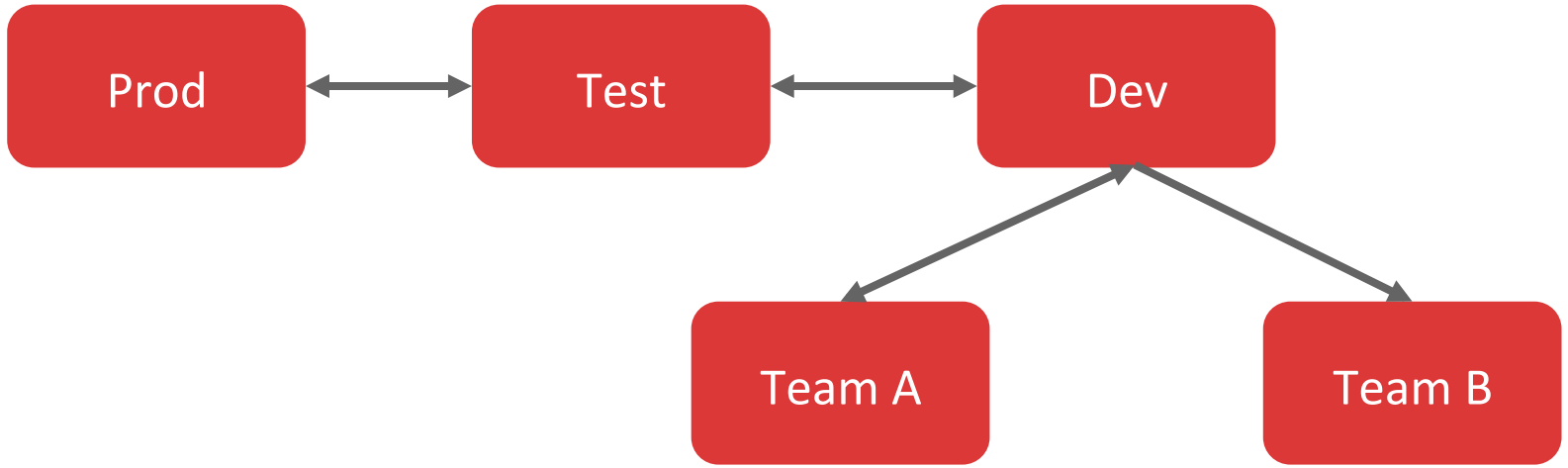
  - Separate update sets track changes independently, but only the **latest change** is active
  - I could be testing an instance with code that is not what is in my update set.
  - What happens when I send my update set upstream?

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Parallelogram



- Intelligent change management is needed
  - Need to easily move updates between instances
  - Need to catch collisions between developers and resolve them
  - Need change approval process to govern change sets
  - Need independent runtimes to test latest changes



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Parallel Development

Running into each other without falling down

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Parent
Dev Hub — OK

Change... | Reconcile

Ready to Pull: 4
Changes waiting to pull from parent

Pull | Push... | Refresh

Local
Demo Server — OK

Compare to...

Local Changes: 23
Changes waiting to queue for push or ignore

Local Changes Go to Version Updated

1 to 10 of 23

All > State = New > Remote Instance = Dev Hub

Record name	Type	Application	Update set	Updated by	Updated ▼
Theme	Table	Ideation	Default	admin	2014-03-17 17:21:44
Theme.Number	Dictionary	Ideation	Default	admin	2014-03-17 17:21:44
Theme	Dictionary	Ideation	Default	admin	2014-03-17 17:21:44
Theme.Number	Field Label	Ideation	Default	admin	2014-03-17 17:21:44
IDTH	Number	Ideation	Default	admin	2014-03-17 17:21:44
Theme.Color	Field Label	Ideation	Default	admin	2014-03-17 17:21:43
Theme	Field Label	Ideation	Default	admin	2014-03-17 17:21:43
Theme.Name	Field Label	Ideation	Default	admin	2014-03-17 17:21:43
Themes	Module	Ideation	Default	admin	2014-03-17 17:21:41
idea_theme.ideation_user	Access Roles	Ideation	Default	admin	2014-03-17 17:21:41

Actions on selected rows...

1 to 10 of 23

Queue All For Push | Ignore All | Back Out All | Reset Filter

Pushes and Pulls (1) | Instance Comparisons | Collisions | Ready to Push | Ignored

Pushes and Pulls Go to Created

1 to 1 of 1

All

Created ▼	Type	Name	Remote Instance	URL	Stage	Created by	Message
2014-03-17 17:16:08	Push	Ideation .1	Dev Hub	http://hub:8081	Complete	admin	Complete

Actions on selected rows...

1 to 1 of 1

Team Dev Operations

- A ServiceNow instance acts as a code repository and a runtime environment
  - Instances are provisioned as normal
  - Parent-child relationships are defined by registering the parent instance for any given child
  - Operations include:
    - Change Parent
    - Pull
    - Push
    - Compare
- See **Team Development** > **Team Dashboard**

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Moving and Reconciling Versions

- Team Dev is based on **Versions**
  - The **Version** table track changes to a customized record over time so that administrators can compare or revert to specific versions later
  - A **Pull** operation queries versions from the parent instance and loads them into the child
  - Both current versions and historical versions are pulled, providing a history of changes made upstream
- The **Local Changes** table shows changes made on the child relative to its current parent
  - Changing parents will reconcile the child to its new parent, creating a new list of local changes
  - Local changes are then queued and pushed to the parent when ready

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Collision Handling

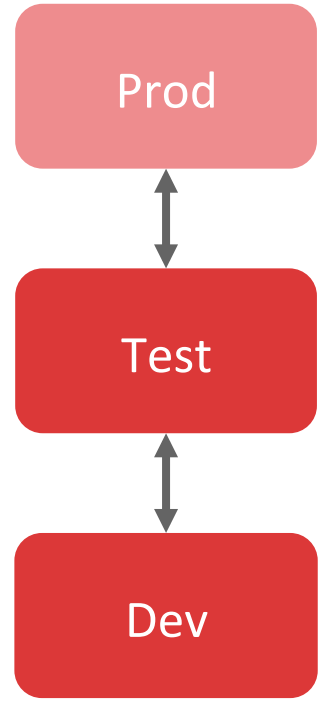
- A **collision** can occur when two people change the same record on different instances

1. You change the incident list layout on **Test**
2. I change the same incident list layout in **Dev**
3. I pull your layout change from **Test** to **Dev**

Result: Collision

1. You change the incident list layout on **Test**
2. I pull your layout change from **Test** to **Dev**
3. I change the incident list layout in Dev
4. I push my layout change from **Dev** to **Test**

Result: No Collision



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Team Dev and Update Sets

Development and Deployment

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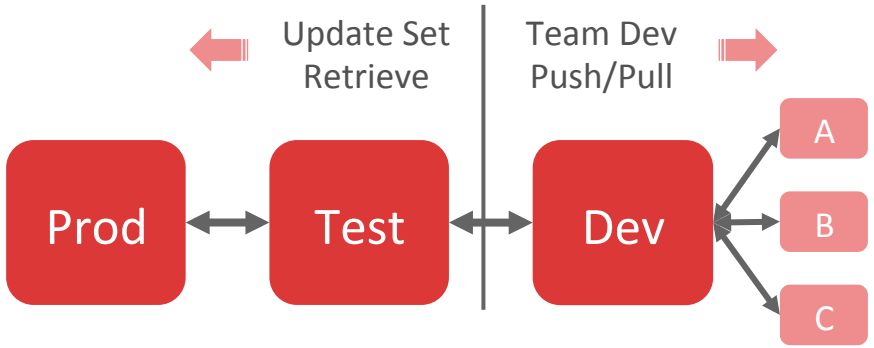
Update Sets in Team Dev

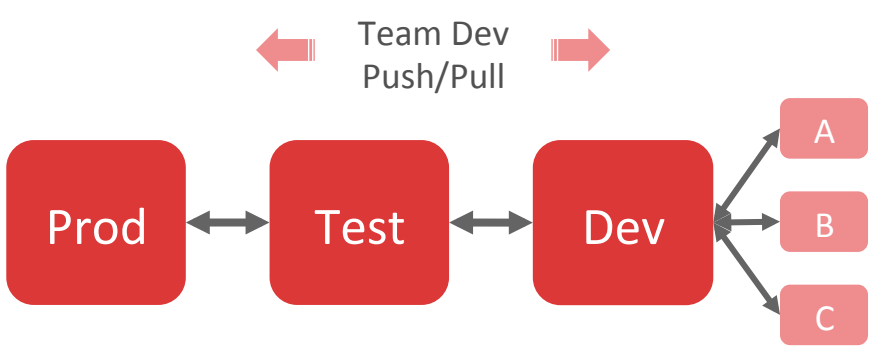
- A Local Update Set is useful for organizing your changes
  - Update sets are change lists
  - The Local Changes list on the team dashboard can be sorted and filtered by Update Set
- …however local Update Sets are not required
  - Local Changes can be filtered by user, by application, or date.
  - Using **Applications** in particular to filter your Local Changes is the most effective.
    - The Local Change appears in the update set of the person that most recently changed it, so the local change effectively moves from one update set to another when a new person changes that file. Similar for Updated By
    - Application assignment is effectively permanent, so local changes will stay put

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Update Sets in Team Dev

- A Push results in a completed Update Set
  - Completed update sets record who pushed what, from where
  - Can be **merged** easily to reduce chatter
  - Can be exported or retrieved as normal
- You have deployment options

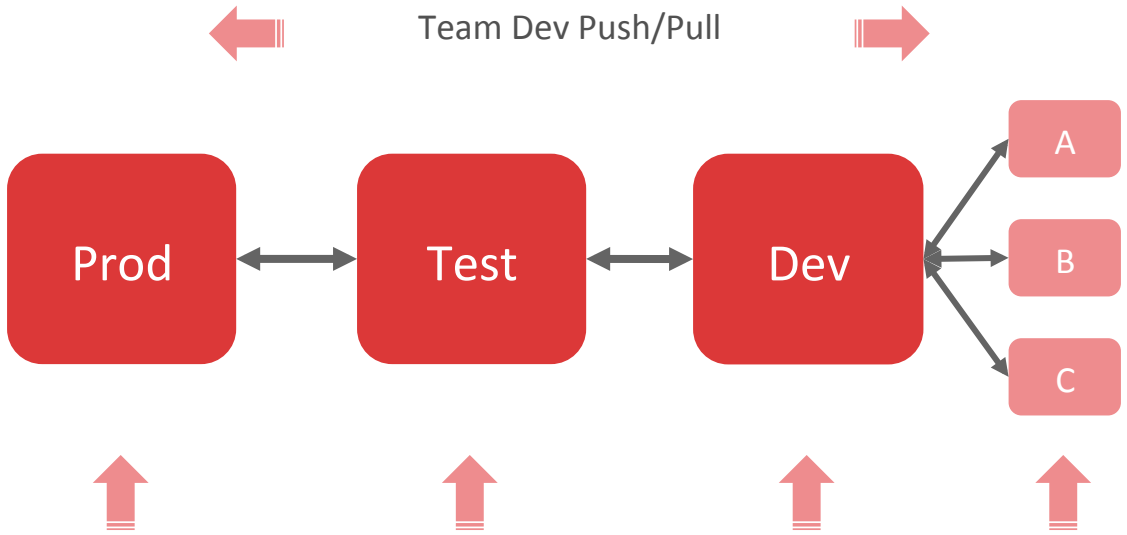




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Update Sets in Team Dev

- Mingling is supported



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Top Takeaways

1 Team Development is for everyone - even one developer with a few instances

2 Parallel development is possible and powerful

3 Team Dev and Update Sets live in harmony

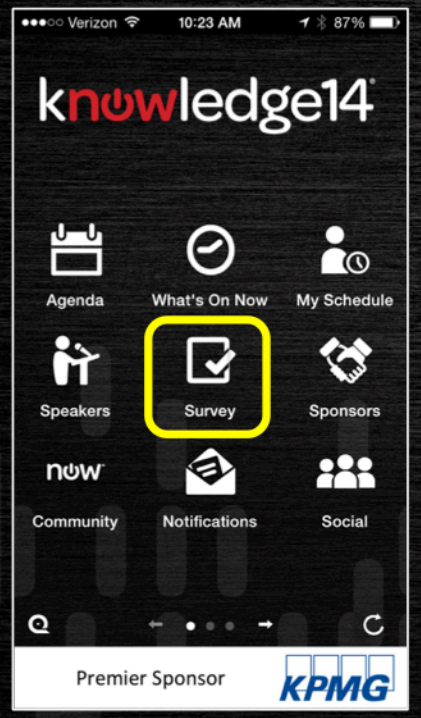
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Lab!

Time to socialize

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Michael Hoefer

Director, Cloud Platform Engineer

ServiceNow

michael.hoefer@servicenow.com

Tulio Quinones

Solution Architect

ServiceNow

tulio.quinones@servicenow.com

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