



Migrating your Managed Package to Salesforce DX

Impacts on Continuous Integration, Developer Experience & Your Business

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TASKRAY

Agenda

CI / CD before Salesforce DX

Salesforce DX Overview

CI / CD Changes with Salesforce DX

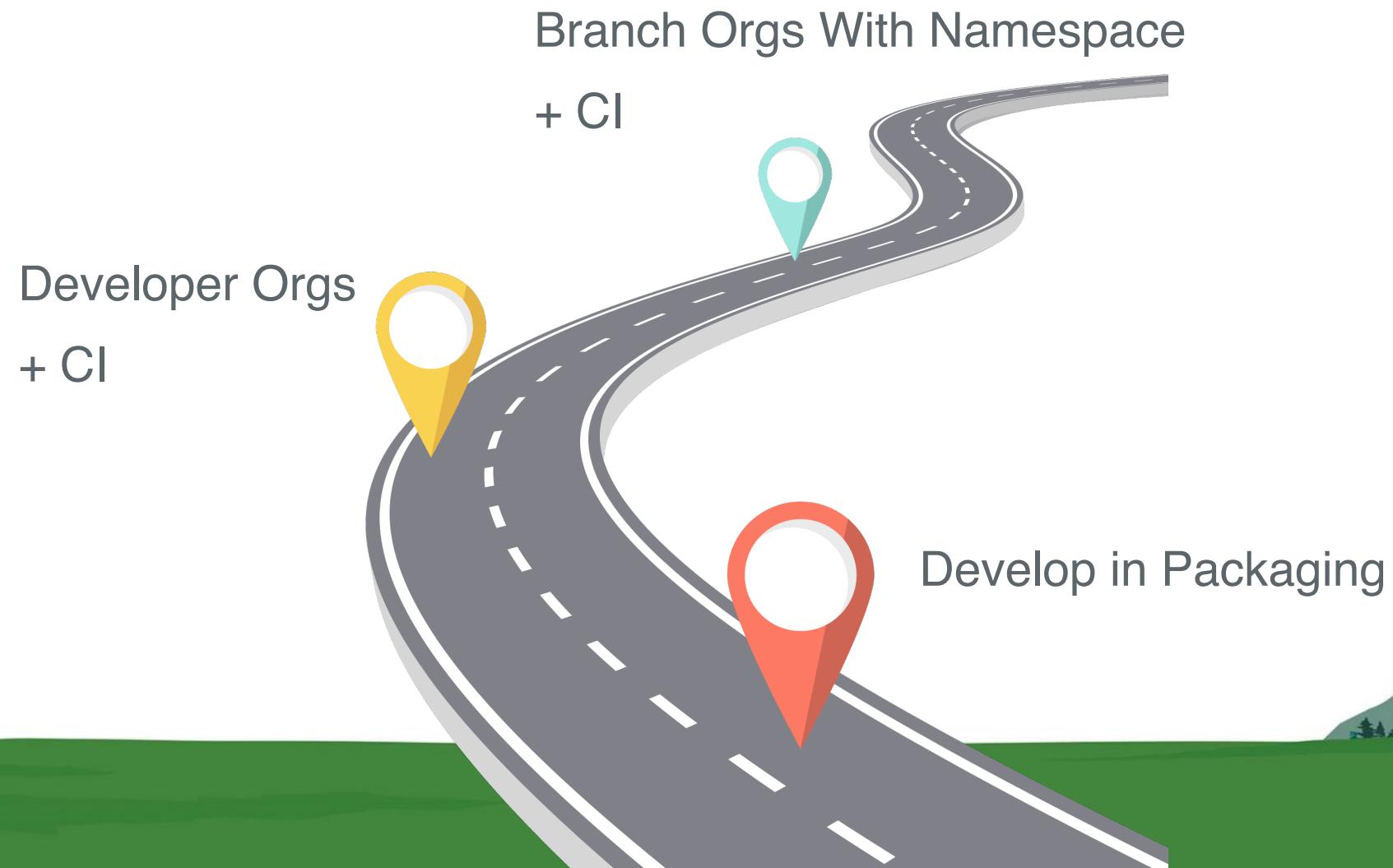
Example Migration

Adoption Timing



Where We Were Before Salesforce DX?

All Over the Place



RIP Branch Orgs



Continuous Integration and Testing with Branch Orgs

293 views

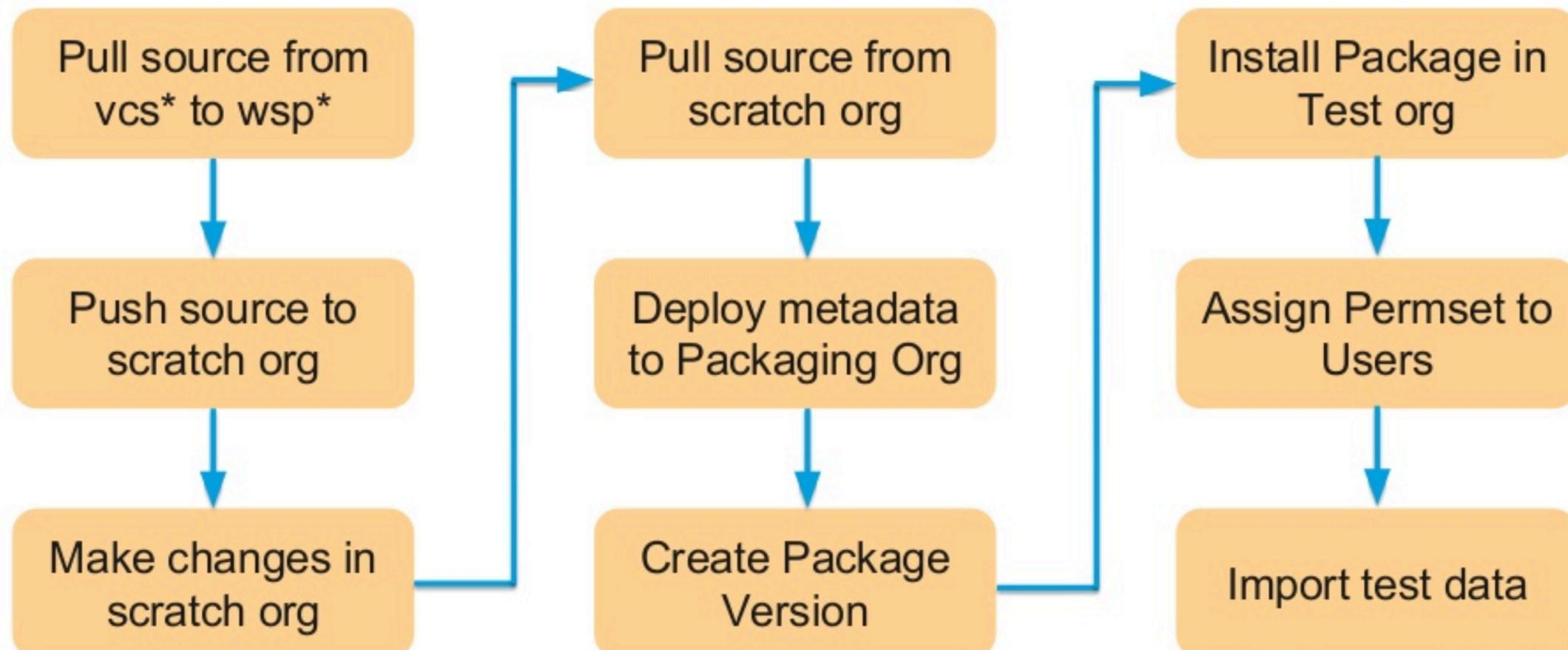


What is Salesforce DX?

Salesforce DX: Development Flow



Salesforce DX for Managed Packages



* vcs = version control system

* wsp = workspace

What Changes With Salesforce DX



Where You Work Changes

Scratch Orgs

- They don't live forever and you're going to use them a lot
- You can generate orgs with a NAMESPACE matching your packaging org :O
- Storing org shape in your project
- Storing test data in your project
- Generate them quick and easy to work on multiple orgs at once



Developer Changes

Makers

Benefit Of Change

- Switching between branches effectively
- Switching between orgs effectively
- Script to your hearts content!

Costs Of Change

- Muscle Memory



Product Managers / QA Changes

Approvers

Benefit Of Change

- Consistent test data
- Consistent test orgs
- Switching between orgs effectively

Costs Of Change

- RIP Long lived orgs



Continuous Integration Changes

Automation

Benefit Of Change

- New concise tool and API!
- Different shapes for the same tests
- No long lived org setup

Costs Of Change

- You get to rewrite it!



Everyone In The Product Organization

Things to think about

- Comfort level with a CLI tool
- Building out scripts for everyone to use
- Building internal tools for people to use



Managing Change



Investment In Change

You need to make it. But when?

- Executive sponsorship is key to success
- The time to complete this will vary
- Try to quantify the pain involved in your current process



Things To Keep In Mind

- New processes should work for everyone
- Salesforce DX source format is different





Example Migration

An Existing Continuous Integration Process

Setup

- Build out a set of orgs with the shape you like (namespace, features, etc.)
- Connect orgs via CI

Usage

- Dev makes feature branch in git
- Dev does work in their own dev org
- Dev makes PR
- PR approved & feature branch merged
- CI does its thing
- PM approves feature

Problems

- Destructive Metadata deploys are hard
- Test data can get progressively worse because orgs can get into the wrong shape
- Orgs can get into the wrong shape and are long lived

A New Continuous Integration Process

Setup

- Inventory your existing testing orgs
- Figure out what new environments/stuff you want
- Come up with scratch org definitions and test data
- Make the move!

Usage

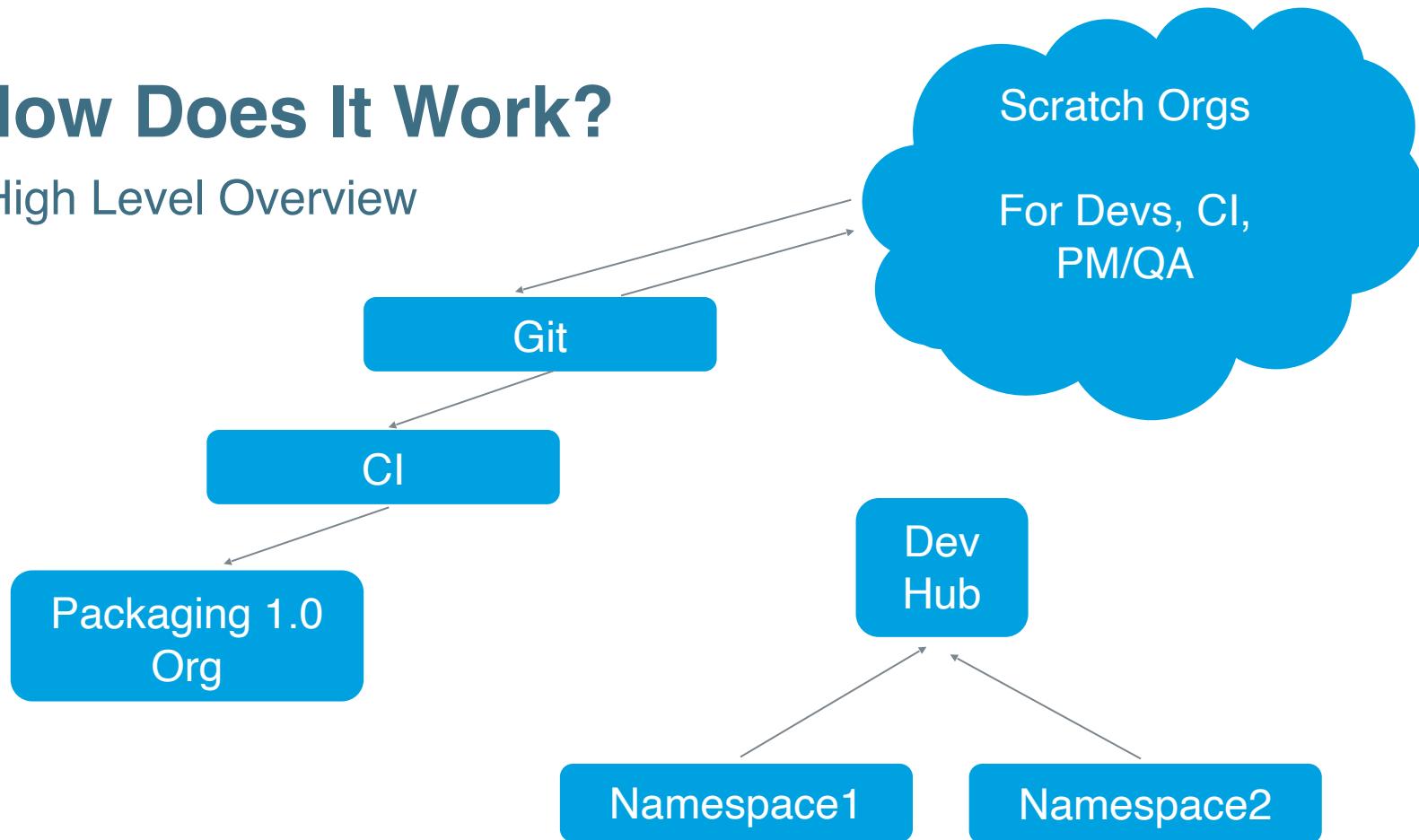
- Dev makes feature branch in git
- Dev creates a scratch org (or a few) for the feature
- Dev makes changes
- Dev makes a PR
- PR approved & feature branch merged
- CI creates scratch org and runs tests on feature
- PM notified that a new feature is on develop
- PM creates appropriate scratch orgs and approves feature

Making the Move



How Does It Work?

High Level Overview



How To Start Using Salesforce DX

It's Easier Than You Think

Establish a Dev Hub

Link Your Namespace to Your Dev Hub

Figure Out How Good Your Current Source Is

Convert Your Source/Package to the New Format

Make a Scratch Org and Do Some Dev



Let's Do It!

Demo





Deciding When To Adopt



How Complex Is Testing Your App?

- Can you make scratch orgs suitable for testing easily?
- Watch out for force:org:shape

Problems with your existing setup?

- What's wrong with your existing CI process?
- Will your existing CI process fail at an inopportune time because it's outdated?



Does It Align with Your Goals?

- Does a migration align with product goals?
 - Packaging 2.0
 - Splitting work up
- Is there going to be something that forces this down the road?

Recap

Where we were

Where we are going

Why we are going to Salesforce DX



Thank You

