TABLEAU CONFERENCE
BNSF Railway: How migrating from 74 sites to 2 tamed the wild west

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Consulting Systems Developer
Technology Services – BI Services
#data19
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BNSF RAILWAY

HOW MIGRATING FROM 74 SITES TO 2 TAMED THE WILD WEST

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BNSF is a Freight Rail Industry Leader

- **32,500** route miles in **28** states and **3** Canadian provinces
- **44,000** employees
- **170** year history
- Move **25%** of rail freight
- **10.7** million carloads shipped in 2018
My Westward Journey
BNSF Tableau Environment

- **Server**
  - **User Count**: 18K Defined
  - **User Location**: See Map
  - **Monthly Counts**: 95K Hits, 100K Emails, 50K Extracts
  - **Machine Count**: 3

- **Desktop**
  - **User Count**: 300+
  - **User Location**: BNSF HQ
  - **User Departments**: TS/Ops
The Origin of the Wild West

In our quest for self service we turned to Tableau

- Tableau Server enabled Spring 2014
- Concerned about server resources
- Allowed site requests and then capped user counts on sites
- Left site admins to do as they pleased
The Good, the Bad and the Ugly

74 sites quickly led to issues like:

- Users with 10+ sites to maneuver between
- Users had to seek out content, or be told by a colleague
- Developers republishing the same data and even the same workbook
- Constant administering of permissions
The Western Dream

**IMPROVE**
SECURITY

**EASIER**
NAVIGATION

**ENABLE**
DATA DEMOCRATIZATION
Applying Some Law & Order

BNSF Site

- **3 Laws Enforced**
  1) All employees have access
  2) Permissions are locked
  3) All Users group set to None
- Automatic project creation

Restricted Site

- **Only 1 Law**
  1) All Users group set to None
- Process to create project
The Great Content Migration

4 Month Timeline

No easy way to migrate content

Developers manually pushed content based on best practices document and content usage reports
Majority found the process to be simple, fast, and easy…

with a few exceptions…

1) Developers with hundreds of reports = 😞
2) Developers with Custom Views = 😞

Most people didn’t giddy up right away

- 50% sites closed in 4 months
- 100% within 5 months
How the West was Won

- Site Admins changed to Project Leaders
- Developed in-house app for Project Creation on BNSF site
- App also allows you to sync Active Directory Groups
Overwhelmingly positive feedback on the **NEW WEST**

- Easier to navigate
- Much easier permission management
- Ability to find other data/reports
After the West was Tamed

Administration through groups has improved Security

• Users go unlicensed and content can be removed

A Clean Slate

• Extracts ↓ 28%
• Emails down ↓ 45%
• Workbooks down ↓ 50%
Lessons Learned / Next Steps

- Snapshot backup to another machine
- New Tableau UI for sub-project navigation
- Best practices for managing projects
- Best practices for publishing
- Improved Documentation
- Published data sources
Please complete the session survey in the mobile app

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What’s on Your Mind Pardner?

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