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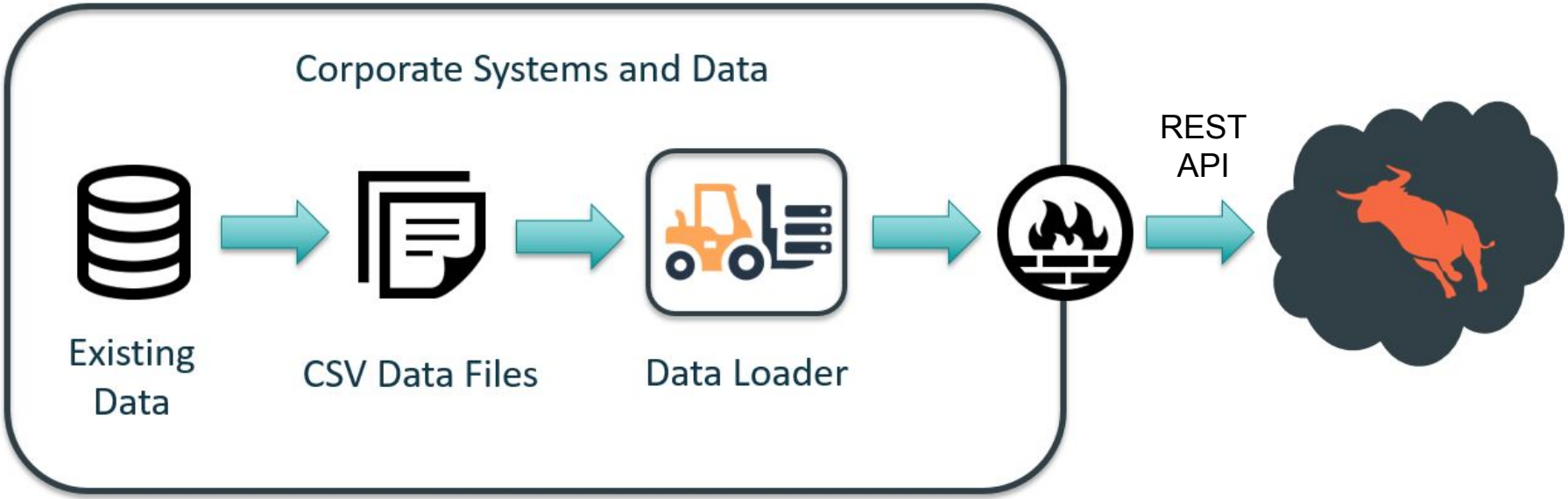
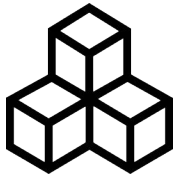
Data Loader

Nathan Dickerson

Data Loader: Mass Import/Update



Migrate your existing data into Bullhorn



Supports the Entire Bullhorn Data Model

Mass uploads from a client's existing CRM

Replaces legacy custom uploader

Mass updates records in Bullhorn

Supports Insert, Update, Delete, Convert, Attach

Data Loader by the Numbers

15 - Integrators *(Kyloe, Newberry, Professional Services, etc.)*
75 - Corporations Loaded *(...and counting)*
13M - Average Records Per Corporation Migration
1M - Average Daily Records Loaded
80 - Resolved GitHub Issues
~30 - Internal Users (Support, Professional Services, etc.)

Data Loader Development Plan

Product Development

Insert, Update, Delete, Attachments
97% Unit Test Coverage
Full Integration Suite

Performance Innovation Project

Take advantage of potential 3x improvement in load times.

User Interface Innovation Project

Desktop App for Windows/Mac
built on Novo Elements

User Interface Innovation Project

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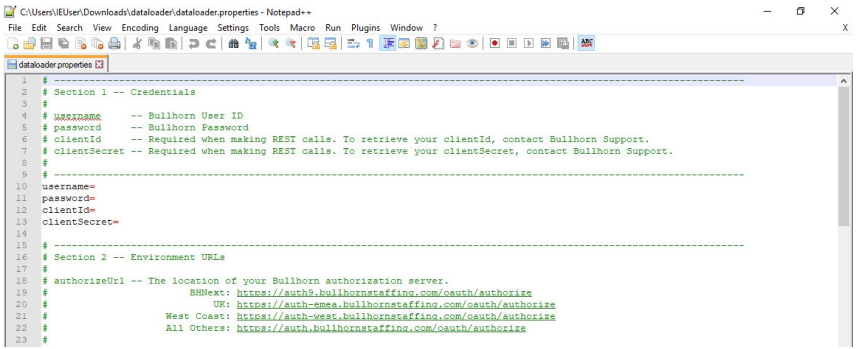
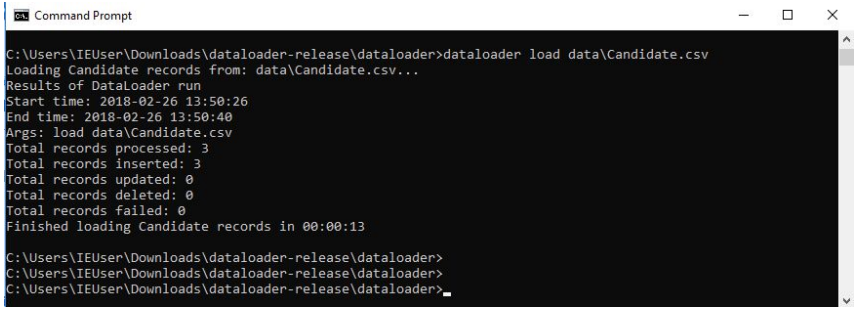
Data Loader User Experience

Quick Start Guide

1. Install Java if you don't have it already (you won't need the development kit for Windows) - Windows | Mac
   i. Verify that you have the latest version of java on the command line by typing: `java -version`, which should show: `java version "1.8"`
2. Download the dataloader.zip file from the downloads section of the Latest Release
3. Extract contents of dataloader.zip file (will extract into a `dataloader` folder)
4. Edit the file `dataloader/dataloader.properties` to enter your account information
5. Place your source CSV files in the `dataloader/data` folder. Rename them to be the name of the entity being loaded, for example: `Candidate.csv`, `Placement.csv`, etc.
6. Open a command prompt in the `dataloader` folder
7. Get familiar with the available fields (column header names) from the example files in the `dataloader/examples` folder or use the `template` command to generate an example file containing all possible fields for the entity, for example: `> dataloader template Candidate`
8. Ensure that the column names in your source CSV exist in the example and/or template CSV files
9. Run dataloader on the command line, for example: `> dataloader load data/Candidate.csv`
10. Check for status on the command line, check for error records in the file: `dataloader/results/<InputFileName>_<Timestamp>_failure.csv`, check for successful records in the file: `dataloader/results/<InputFileName>_<Timestamp>_success.csv`, and check for full output in the `dataloader/log` directory





What users are saying...

What's the command line?

Where does this go on my PC?

Is there duplicate checking?

Wait, I need to get a new version?

Demo!

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Coming soon...

- Auto-Updates (check for newer version)
- Export current data (undo capability)
- Provide field map labels
  - parentClientCorporation => “Parent Company”
- Delete, Convert, Load Attachments
- Load multiple files at the same time

Performance Improvement Innovation Project

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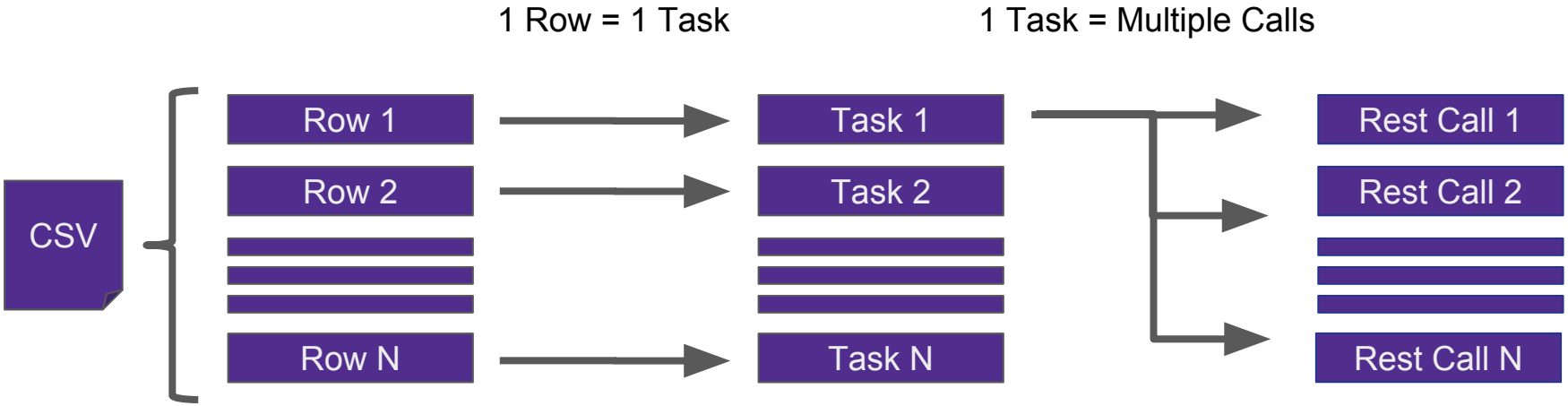
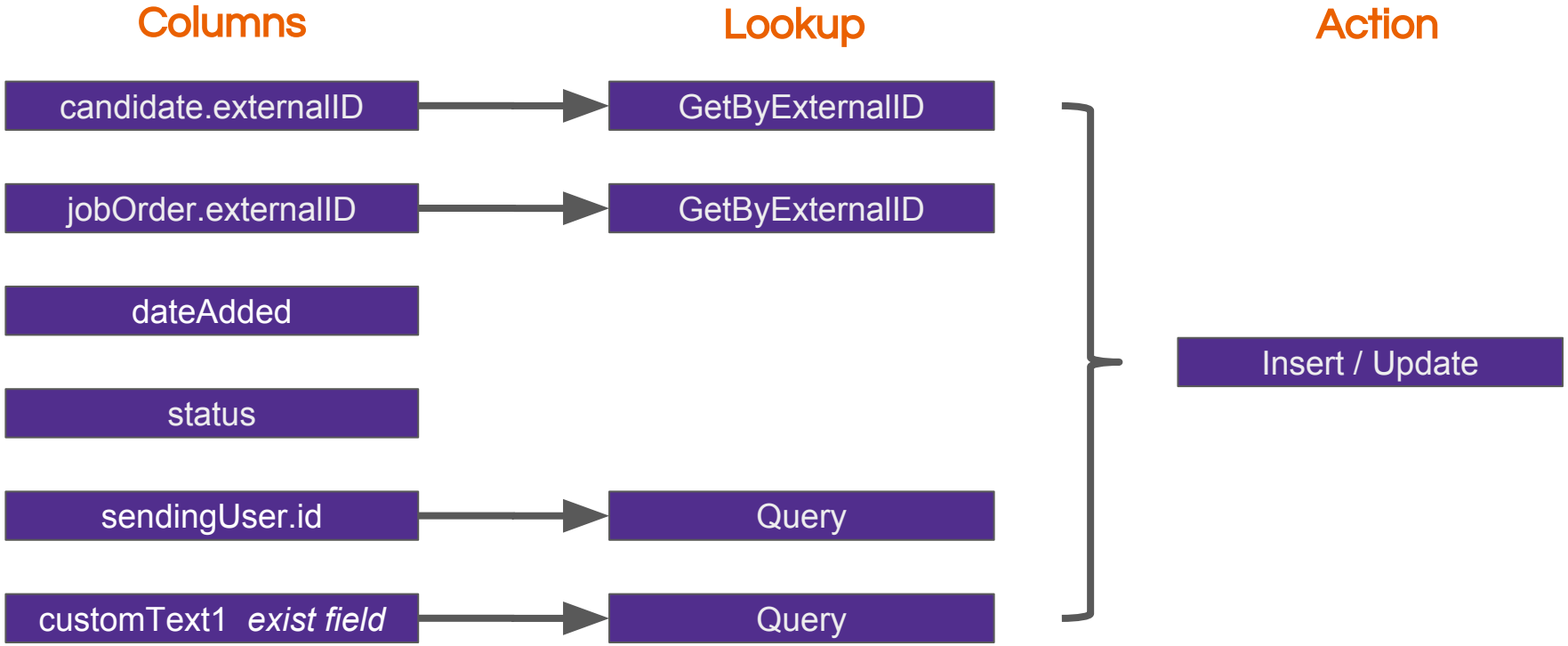
Row ➔ Task ➔ Rest Calls

```
$> dataloader data/Candidate.csv
```



Process 1 task per thread, with up to 15 threads simultaneously

Job Submission Example



Performance Targets

Entity	# Records	Today	Future (est)
Candidate	30k	10min	3min
Candidate	1M	4hr	1hr
Notes	100k	2hr	30min
Notes	3M	10hr	2hr

Unlock new Validate and Backup Workflow Steps

Questions?

Come See Us At the Connect Booth!

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Backup Slides

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Planned Improvements

- Batch lookup (500 per call)
- Bundle One-To-Many Associations
  - Already done with Notes

Rest Calls For Loading

Dup Check - To-Ones - Insert/Update - To-Manys

1. **Lookup** - Duplicate Check (if field(s) are given to duplicate check against)
2. **Lookup** - One-To-One Associations (Linked Company, Primary Skill, etc.)
3. **Action** - Insert or Update Record
4. **Lookup** - One-To-Many Associations (Candidates, Skills, Categories, etc.)
5. **Action** - Insert or Update One-To-Many Associations

Longest Kyloe Data Loader Runs

Run by Kyloe on 1/11/2018 - 1/15/2018 against UK SLs

Entity	# Records	Before	After (est.)
JobSubmission	1 Million	28 hours	8 hours
Notes	1 Million	60 hours	18 hours

Estimated time with bulk find calls: 3X Improvement!!!

Verification Test Runs

Run on 2/14/2018 against BHNext

# Records	Threads	# Lookups	Duration	Savings
1,000	15	5	4:01	
1,000	15	1	1:45	58%

Estimated performance with batch lookups: (not available today)

# Records	Threads	# Lookups	Duration	Savings
1,000	15	1/100	1:15	70%

A Text Slide (Bullets)

- This is the first bullet
- This is the second bullet
  - This is a sub bullet
    - This is a sub bullet

A Text Slide (No Bullets)

This is text that isn’t bulleted.

This is where you could put divider text

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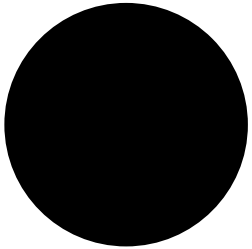
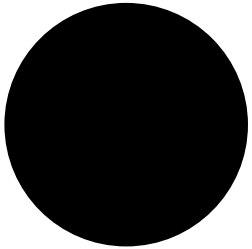
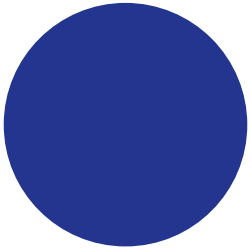
Engage Colors



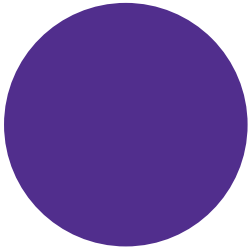


Dark Violet

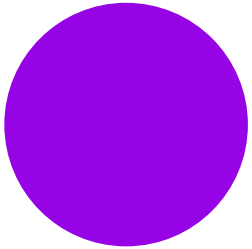
Good for dark text



Engage Blue



Engage Purple



Highlight Purple

Use sparingly

This is an accent color and should be used with bullets or as a design element (sparingly)

Secondary colors – these work well on dark backgrounds as text colors or accent colors