

Writing User Defined Functions



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Overview



Grunt Shell

User Defined Functions


Piggy Bank

Sharpen Pig Latin Skills

Pig Editor

Pig Scripts



A large sand dune in a desert under a clear blue sky. The dune is a smooth, golden-brown slope that rises from the left and peaks towards the right. A sharp shadow is cast across the dune's surface, dividing it into a dark, shadowed left side and a bright, sunlit right side. The texture of the sand is visible on the sunlit side. In the background, other smaller dunes and distant hills are visible under a clear, pale blue sky.

Sandbox = Pig Editor

Pig Grunt Shell

Interactive shell that allows users to enter Pig Latin scripts & interact with HDFS

How to Access

When using Pig locally or sandboxed version

Use: `$pig -x local`

When using Pig for multiple nodes

Use: `$pig -x mapreduce`

Basic Grunt Shell Commands

Help
>**help**

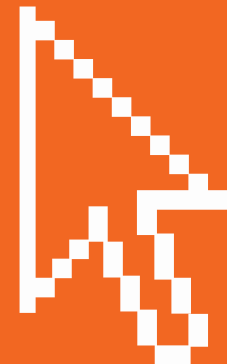
List Directory Contents
>**ls**

Change Directory
>**cd**

Grunt Shell

Command Prompt

SSH into Sandbox



Why Do This?

```
weather_raw = LOAD '/user/hue/weather.csv' USING
PigStorage(',') AS (id:chararray, name:chararray,
date:datetime, day_high:int, day_low:int);

X = FOREACH weather_raw GENERATE day_high * 1.8 +32;

DUMP X;
```

When We Can Do This!

```
weather_raw = LOAD '/user/hue/weather.csv' USING  
PigStorage(',') AS (id:chararray, name:chararray,  
date:datetime, day_high:int, day_low:int);
```

```
X = FOREACH weather_raw GENERATE ToFahrenheit(high_temp );
```

```
DUMP X;
```

Pig UDF

User defined functions are custom code written to specify custom processing in Pig Latin.

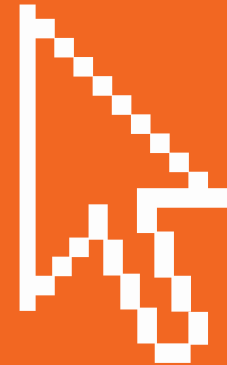
UDF Languages

- Java
- Python
- JavaScript
- Ruby
- Groovy

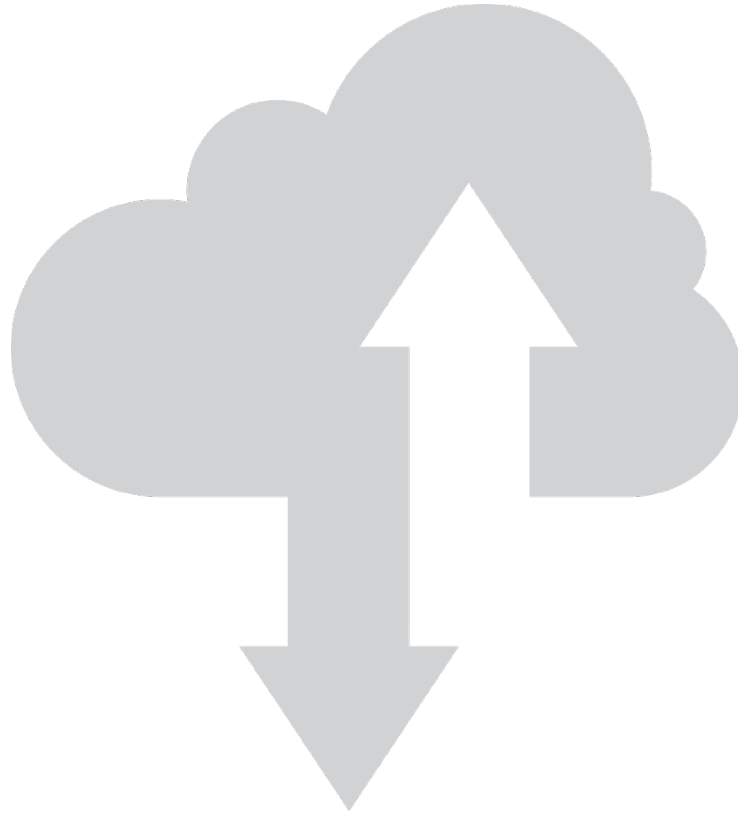
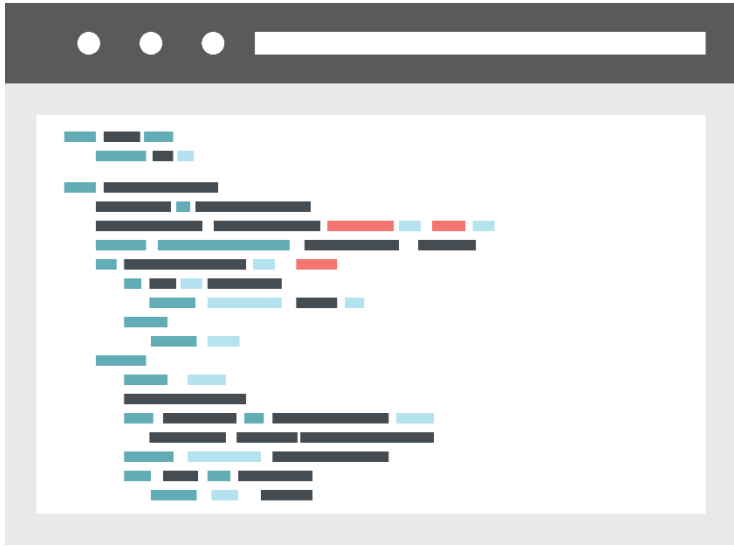


UDF Demo

Sample UDF



Piggy Bank



Piggy Bank

Pig.apache.org

SVN





Congratulations
Basic Pig Latin

Keep Learning

- Join the mailing list
 - user-subscribe@pig.apache.org
- Documentation is your Friend
- Answer Questions on Discussion Post
- Commit to Piggy Bank
- Contribute to the Pig Project



That's all
folks.



Summary

Grunt Shell Basics

Looked at Piggy Bank

Developed User Defined Function

How to get Involved