**Day 1**

* **Overview**
	+ Oracle vs PostgreSQL
	+ History
	+ Major Features
	+ PostgreSQL Limits
	+ PostgreSQL Process Architecture
	+ MVCC
	+ Write Ahead Logging
	+ The Background Writer
	+ PostgreSQL Version Highlights
	+ AWS Aurora
		- Pros/Cons
* **PostgreSQL Data Types**
	+ Numeric Types
	+ The Monetary Type
	+ Character Types
	+ Binary Types
	+ Date / Time Types
	+ The Boolean Type
	+ Enumerated Types
	+ Geometric Types
	+ Network Address Types
	+ The Bit String Type
	+ Text Search Types
	+ UUID
	+ XML
	+ JSON Types
	+ Array Types
	+ Composite Types
	+ Range Types
	+ The OID Type
* **PostgreSQL Installation**
	+ Platforms
	+ RPM Based Installation
	+ Initializing a Cluster
	+ Starting & Stopping a PostgreSQL Cluster
	+ Dropping / Removing a PostgreSQL Cluster
	+ AWS Aroura
		- Initializing and Auroura Instance
		- Starting & Stopping an Aurora Instance
	+ Lab
* **PostgreSQL Configuration**
	+ Access Control
	+ The postgresql.conf File
	+ ALTER DATABASE / ALTER ROLE
	+ The show command and the SET command
	+ PostgreSQL Settings Walkthrough
	+ AWS Aurora
		- Parameter Settings
		- Parameter Groups
		- Deploying Setting Changes
		- Parameters available in AWS Aurora
	+ Lab
* **Intro to psql**
	+ Command line parameters
	+ Meta commands
	+ SET Commands
	+ psql Security
	+ Lab

**Day 2**

* **Moving Data with PostgreSQL**
	+ Moving Data with DML
	+ COPY
	+ COPY vs \copy
	+ Lab
* **Functions and Operators**
	+ Comparison Functions and Operators
	+ Mathematical Functions and Operators
	+ String Functions and Operators
	+ Binary String Functions and Operators
	+ Bit String Functions and Operators
	+ Pattern Matching
	+ Data Type Formatting Functions
	+ Date/Time Functions and Operators
	+ Enum Support Functions
	+ Geometric Functions and Operators
	+ Network Address Functions and Operators
	+ Text Search Functions and Operators
	+ XML Functions
	+ JSON Functions and Operators
	+ Sequence Manipulation Functions
	+ Conditional Expressions
	+ Array Functions and Operators
	+ Range Functions and Operators
	+ Aggregate Functions
	+ Window Functions
	+ Subquery Expressions
	+ Row and Array Comparisons
	+ Set Returning Functions
	+ System Information Functions
	+ System Administration Functions
* **Managing PostgreSQL Databases**
	+ Creating Databases
	+ Creating Schemas
	+ ALTER SYSTEM
	+ Creating Tables
	+ ALTERING Tables
	+ JOINS
	+ INDEXES
	+ Lab
* **Roles and Security**
	+ VIEWs
	+ Creating ROLES / USERS
	+ Sequences
	+ Permissions
	+ Lab

**Day 3**

* **Tablespaces, Partitioning and Advanced Features**
	+ VACUUM
	+ Tablespaces
	+ Inheritance
	+ Inheritance Based Partitioning
	+ Declarative Partitioning
	+ Lab
* **Routine DBA Tasks and Best Practices**
	+ Log Management
	+ Query Analysis
	+ VACUUM & Monitoring
	+ REINDEX
	+ Lab
* **Monitoring & Statistics**
	+ Database Logs & OS Moniotoring
	+ The PostgreSQL Statistics Collector
	+ The PostgreSQL Statistics VIEWs
	+ PG Badger & PGCLUU
	+ AWS Aurora
		- Logs
		- PG Badger / PGCLUU
		- AWS Aurora Cloudwatch Metrics
	+ Lab
* **PostgreSQL Performance Tuning**
	+ OS & Hardware Tuning
	+ Checkpoint Tuning
	+ Query Tuning
	+ Lab
* **Backup & Recovery**
	+ Logical Backups
	+ Logical Restore
	+ Restore via a List File
	+ Physical Backup
	+ Physical (PITR) Restore
	+ AWS Aurora
		- Logical Backups
		- Physical Backups
		- Recovery
	+ Lab

**Day 4**

* **Foreign Data Wrappers**
	+ Installation
	+ Deploy FDW Tables
	+ FDW Joins & Other Constructs
	+ Lab
* **Replication and High Availability**
	+ Streaming Replication
	+ Logical Replication
	+ High Availability (and HA Tools)
	+ AWS Aurora
		- Read Replicas
		- HA
	+ Lab
* **Logical Replication**
	+ Logical Replicatopn Concepts
	+ Logical Replication vs pglogical
	+ Setup
	+ Monitoring & Debugging
	+ Lab
* **PostgreSQL Upgrades**
	+ Minor Version Upgrades
	+ Major Version Upgrades
	+ pg\_upgrade
	+ Logical Replication Based Upgrades
	+ AWS Aurora Upgrades
	+ Lab
* **PostgreSQL Contribs and Extensions**
	+ PostgreSQL Contribs
	+ PostgreSQL Extensions
	+ Extensions available / Not available in AWS Aurora
	+ Lab

**Day 5**

* **The PL/pgSQL Procedural Languages**
	+ Overview
	+ Structure
	+ Declarations
	+ Expressions
	+ Basic Statements
	+ Control Structures
	+ Cursors
	+ Errors and Messages
	+ Examples
	+ Lab
* **PostgreSQL Triggers**
	+ Overview of Trigger Behavior
	+ Visibility of Data Changes
	+ Trigger Variables
	+ Trigger Examples
	+ Lab
* **EVENT Triggers**
	+ EVENT Triggers Overview
	+ EVENT Trigger Events
	+ Examples
	+ Lab
* Questions