

# Tungsten Cluster Master Class

Basics: Simple Clustering Installation

Chris Parker, Customer Success Director, EMEA & APAC



The MySQL Availability Company

# Topics

In this short course, we will

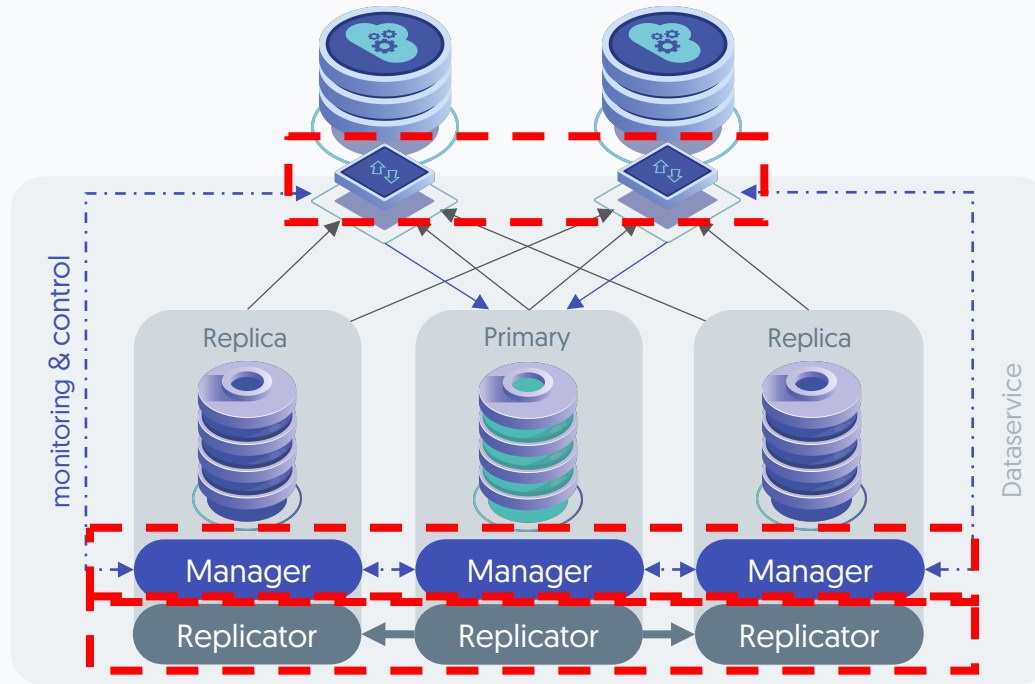
- Re-cap of the Architecture and Topology
- Plan the installation
  - Documentation
  - Software
  - Environmental Decisions
- Review Pre-Requisites
  - Review Installation Types and methods
- Walk Through: Simple 3 node cluster installation



# Architecture Re-Cap



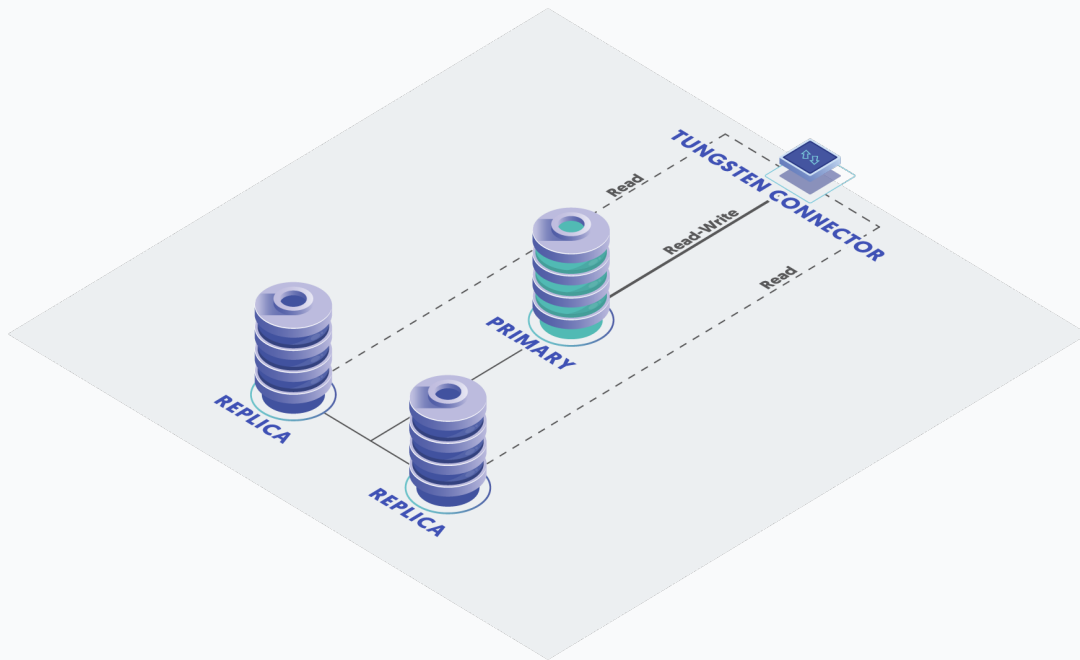
# Tungsten Clusters



# Tungsten Cluster

## Standalone Cluster

- Minimum 3 nodes
  - 1 Primary
  - 2 Replicas
- Odd number of nodes
- Single datacenter/region



# Preparing to Install



# Pre Installation Environment Decisions

- Where will the connectors be installed?
- Which release [and version] of MySQL will be used?
- What monitoring tools do you have in place?
- What backup tools do you plan to use?



# Pre-requisites





# Prerequisites

- Review online documentation
  - <https://docs.continuent.com>
  - Download the Prerequisite Checklist
- Host
  - OS User
  - /etc/hosts
  - sudoers and ssh?
  - Ruby
  - Java
- Network
  - Review Port Requirements
- MySQL
  - my.cnf settings
  - User accounts



# Installation Methods and Types



# Pre Installation Tungsten Decisions

- TAR package or RPM?
- INI-based Install or Staging?
  - Composite Active/Active only support INI Install
- Which Connector Mode?
  - Bridge mode is default
- Do you require SSL?



# ini vs staging

## ini

- Install managed by tungsten.ini file per host
- Pros
  - Controls over each node
  - Easy integration to automation such as puppet/chef etc
  - Removes dependency on a single host
- Cons
  - Configuration must be performed per host
  - Risk of misconfiguration between hosts

## Staging

- Install managed from a single staging host
- Could be a cluster node, or separate host
- Pros
  - One single place for configuration
  - Easy to install/update
  - Less risk of a misconfiguration
- Cons
  - Not easy to integrate with automation software
  - Staging host becomes Single Point of Failure [SPOF]
  - Not compatible for Composite Active/Active topologies



# Walk Through: Simple Install



# AWS?

- Consider using the free ansible recipes that will do everything for you!
  - <https://www.continuent.com/resources/blog/automated-mysql-server-preparation-using-ansible>
- Provisions Host(s)
- Completes all Prerequisites
- Configures MySQL
- Installs Tungsten Clustering
- Or the Tungsten Clustering AMI available in the Amazon Marketplace (Free 14 day trial)



# Summary

What we have learnt today

- Reviewed the the Clustering architecture
- Explored the documentation and prerequisites
- Completed two installations



# Next Steps

In the next session we will

- Re-cap the installation steps.
- Explores the command line tools used to operate a cluster





# THANK YOU FOR LISTENING

[continuent.com](https://continuent.com)

Chris Parker, Customer Success Director, EMEA & APAC



The MySQL Availability Company