

CYGNET FOR WELL TESTING

Blake Miller
Principal Engineer

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AGENDA

1 Overview

2 High-Level Process Flow

3 Device Logic Building Blocks

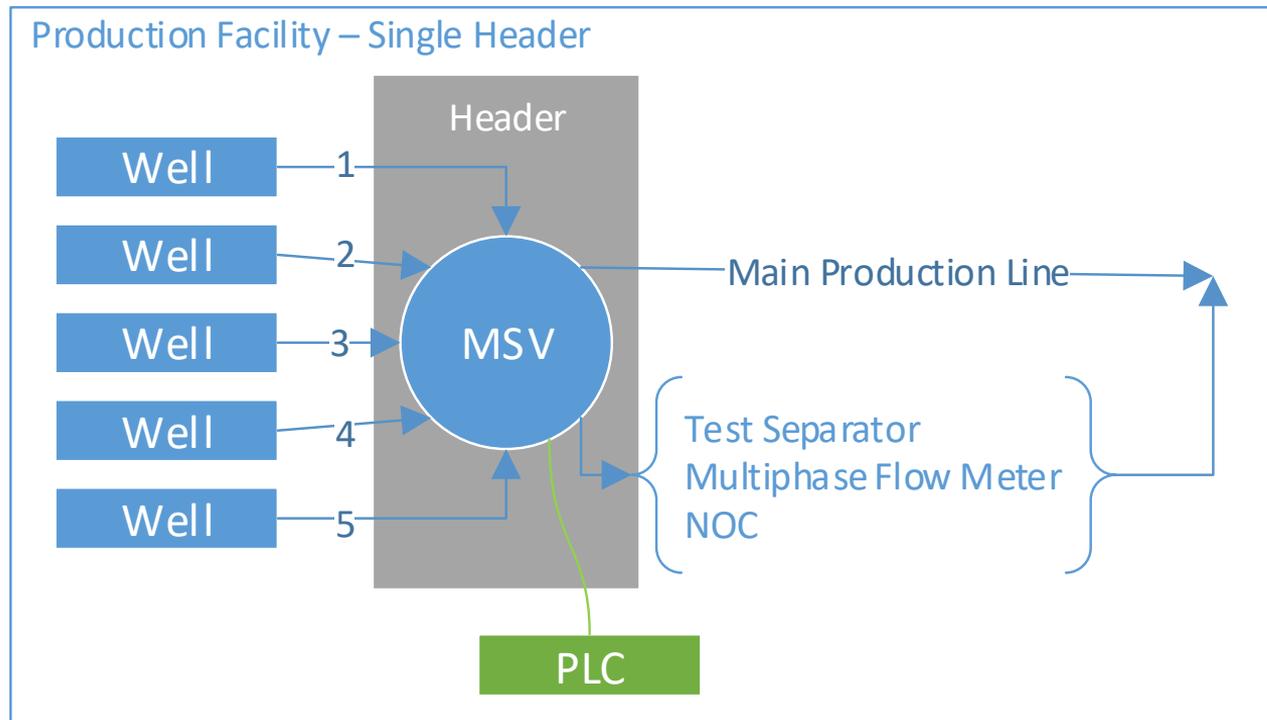
4 Demo

5 Release Planning

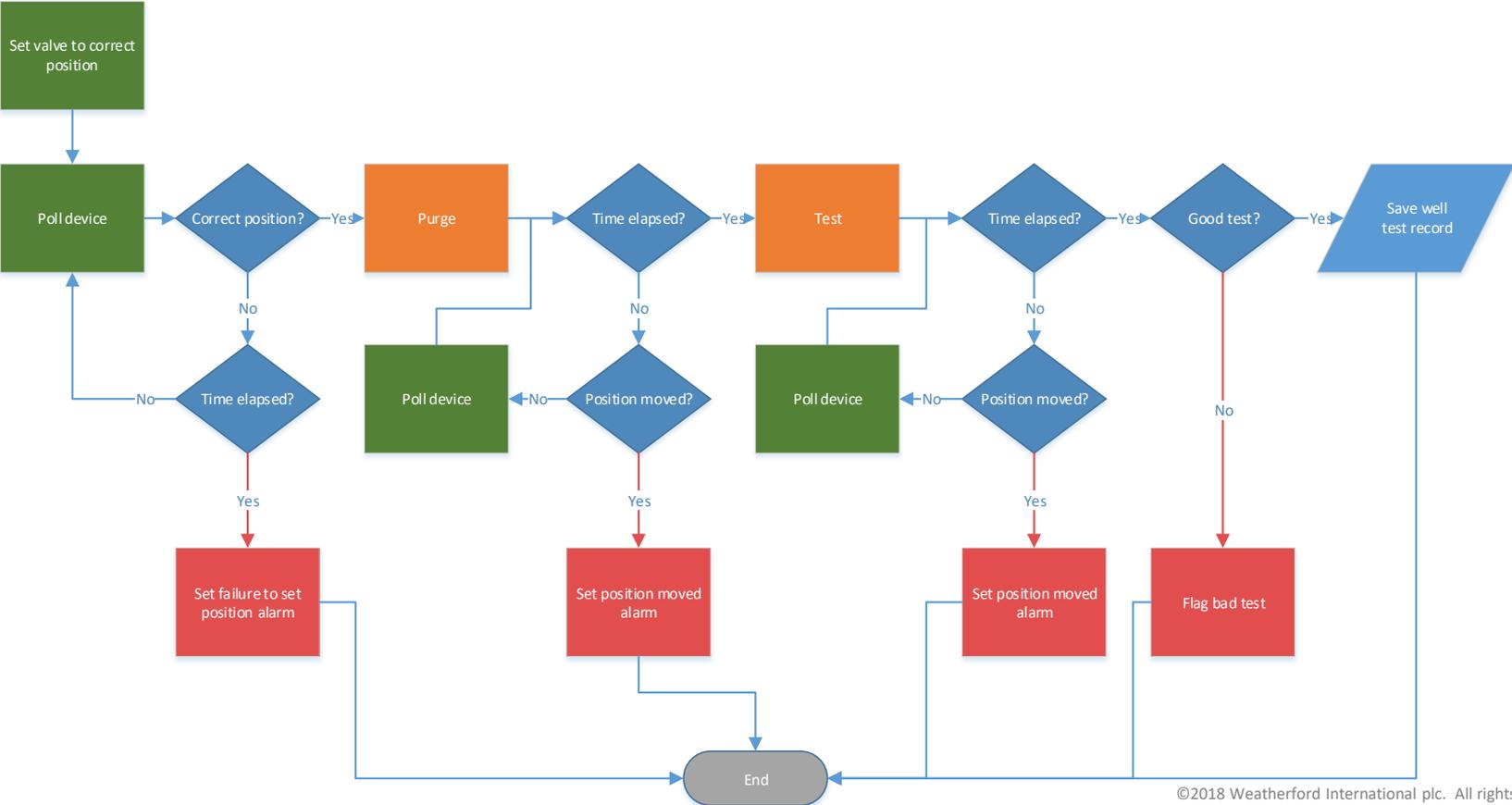
Typical Field Configuration

Characteristics:

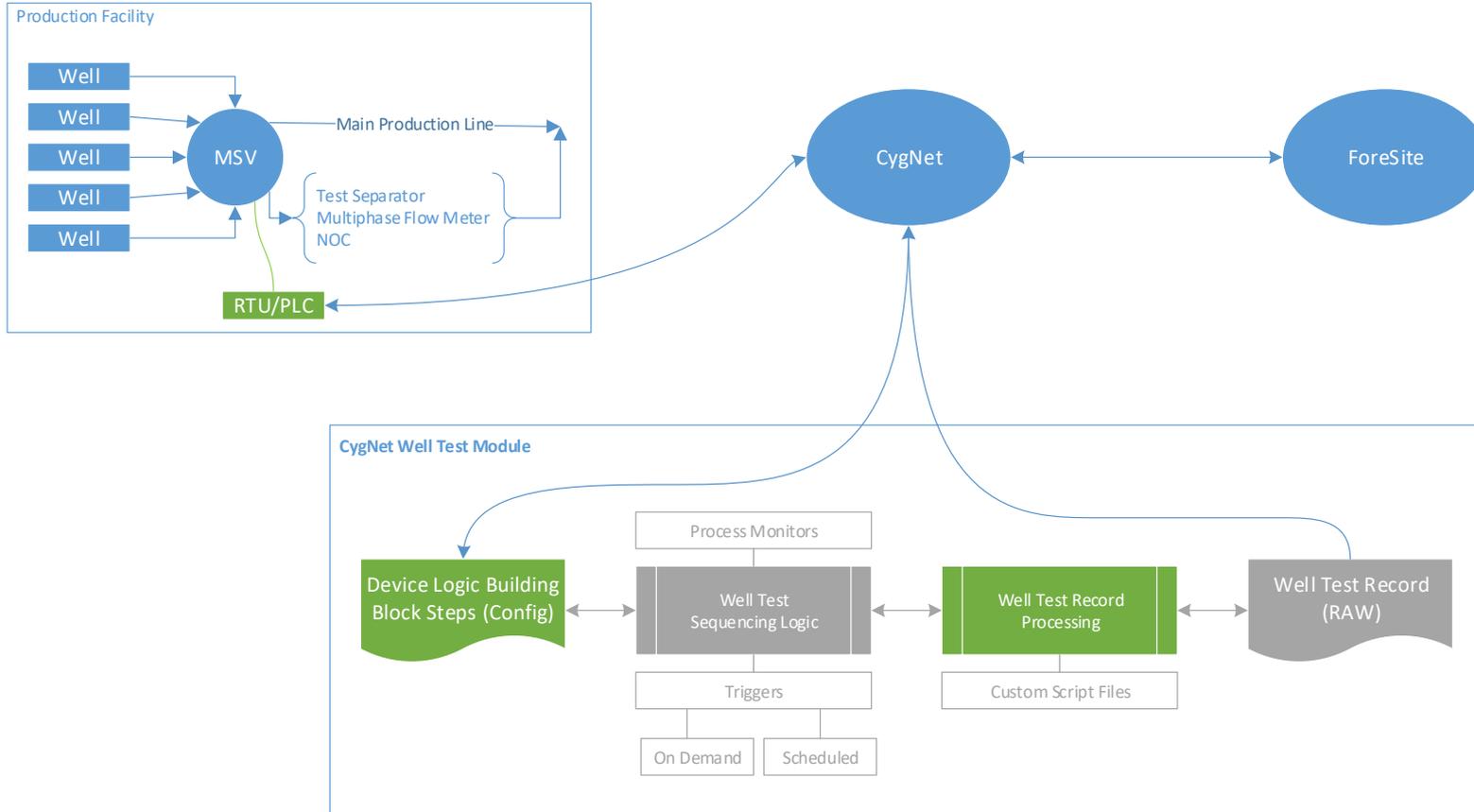
- Multiple wells
- Single valve
- Single test facility
- PLC/RTU



Sample Device Logic



High-level Overview

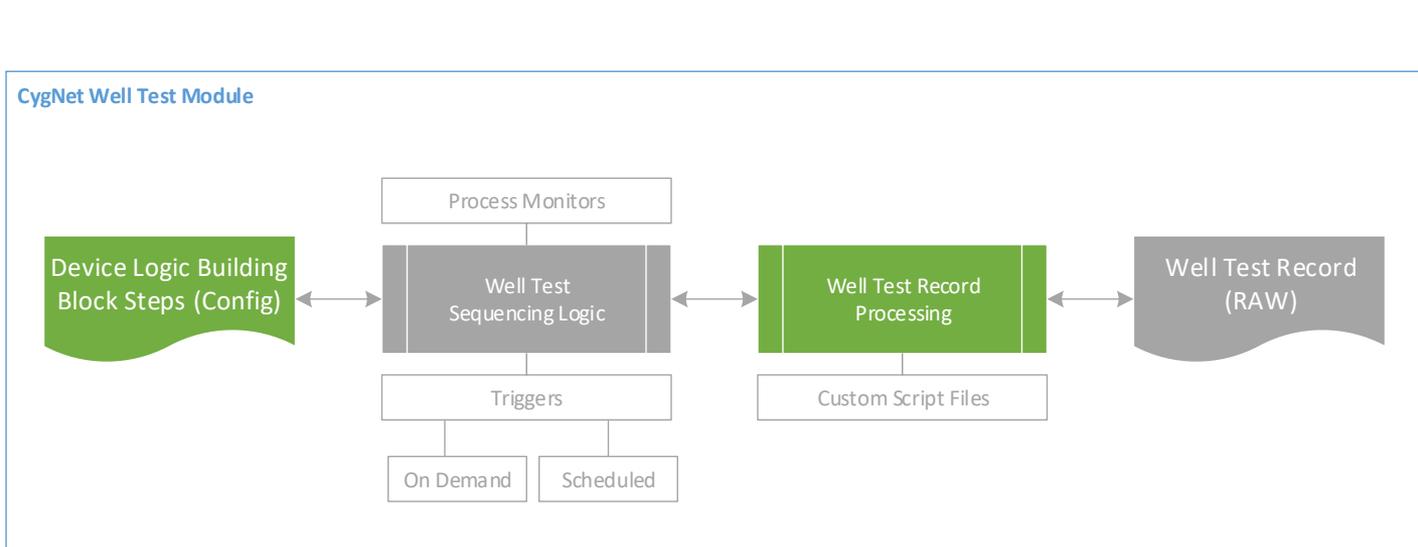




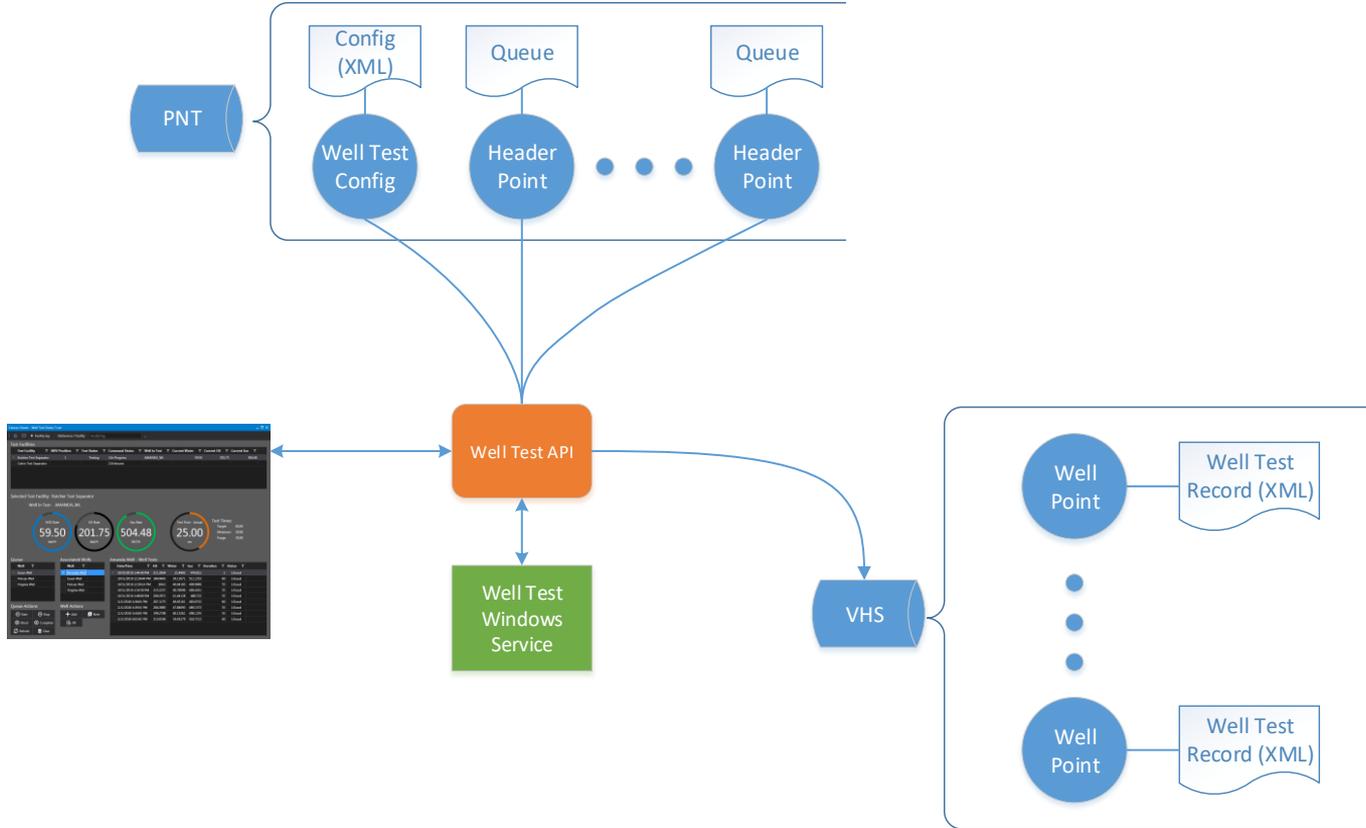
| CYGNET SOLUTION

High-Level Process Flow

- Leverages CygNet Infrastructure
- Building blocks for replicating device logic
- Triggers to affect Well Test process
- Hooks for ForeSite



CygNet Solution



Device Logic Building Blocks

- **UIS Command**
 - Issues standard UIS command
 - Uses supplied service, facility ID, command, parameters, and optional status point
 - Flexible parameter building model
 - Relative facility aware
- **Set Point**
 - Standard set point command
 - Uses tag and value
 - Relative facility aware
- **Exit**
 - Exits/stops current action

Device Logic Building Blocks

- Test
 - Wait operation
 - Used for time-based operations such as purge or well test
 - Optional point based wait time
 - Optional condition based exit
 - Relative facility aware
- Point Value Compare
 - Evaluates an expression with two parts
 - Provides two courses of action
 - Support for hard-coded values
 - Support for point value look-up
 - Relative facility aware

Device Logic Building Blocks

- Script
 - Used to process well test record values
 - Stock script supplied if no computation is required
 - BSS and local file system support
- Monitor
 - Used for device-based (PLC) mode
 - Configuration of multiple condition/action pairs
 - Define a condition to evaluate
 - Specify actions to take when conditions are met
 - Optional sleep timer and time out actions



| Demo



| Release plan

Release Plan

- Initial release of CygNet Well Test Module
 - CygNet 9.2
 - End of year
 - Doesn't include configuration UI