Smarter technology for all

Servicing Neptune Liquid Cooling systems

ES42714

November 2024

Lenovo

Prerequisites

- ES51757B – Introducing ThinkSystem tools

- ES52374 – ThinkSystem tools for the ThinkSystem V3 platform

- ES52678 – ThinkSystem tools for the ThinkSystem V4 platform

- ES41759C – ThinkSystem problem determination

Objectives

After completing the course, you will be able to:
- Describe Neptune Liquid Cooling systems
- List the servers that support Neptune Liquid Cooling systems
- Describe the different types of Neptune Liquid Cooling systems
- Describe Neptune Liquid Cooling components
- Describe the problem determination steps and explain how to troubleshoot issues with Neptune Liquid Cooling systems
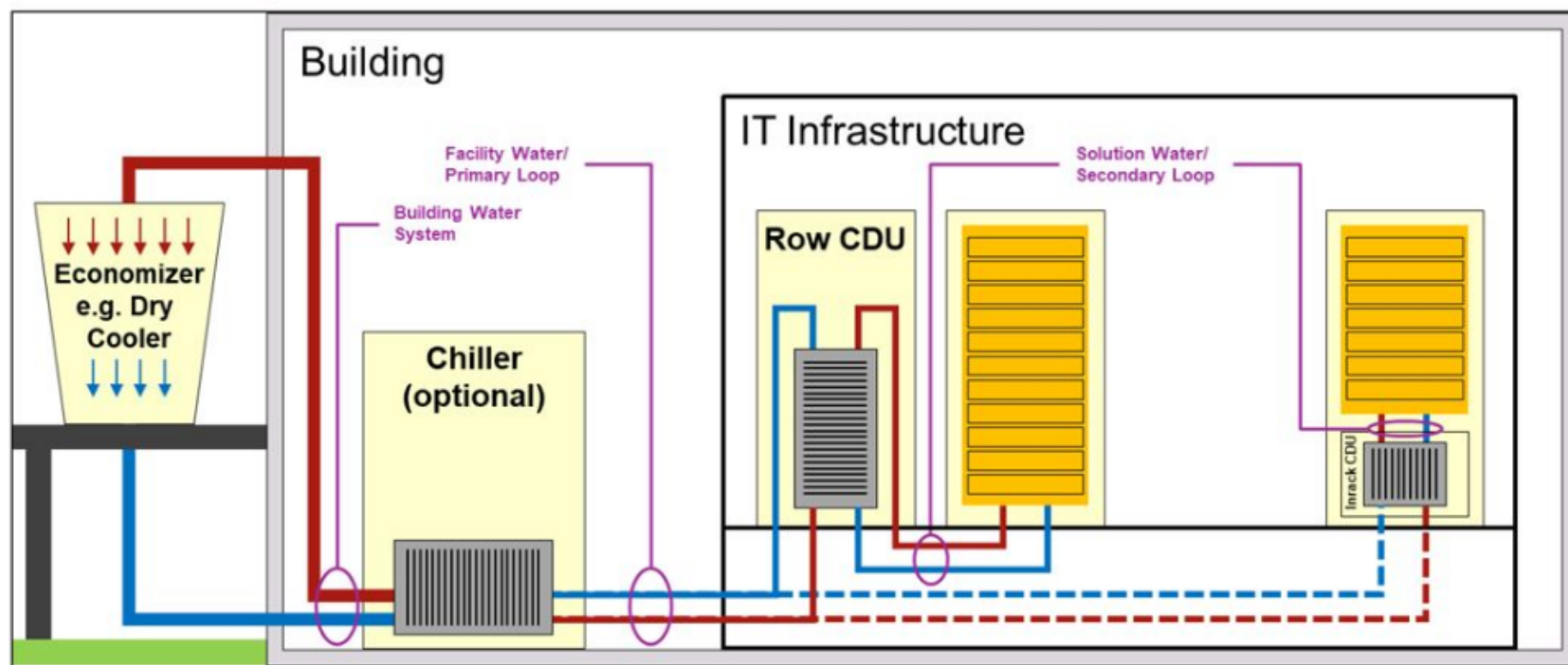
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Neptune Liquid Cooling overview

Introducing Neptune Liquid Cooling systems

Neptune Liquid Cooling overview

Neptune Liquid Cooling technology is designed to enhance data center efficiency by using direct liquid cooling for CPUs, memory, and other critical components. This significantly reduces energy consumption and heat, enabling higher performance while lowering operational costs. By efficiently managing temperature, Neptune allows servers to handle heavy workloads in high-density environments while maintaining sustainability goals. The technology integrates with ThinkSystem servers to offer optimal cooling performance for large-scale data operations.

ThinkSystem support for Neptune Liquid Cooling

As of Q4 2024, the following ThinkSystem products support Neptune Liquid Cooling:

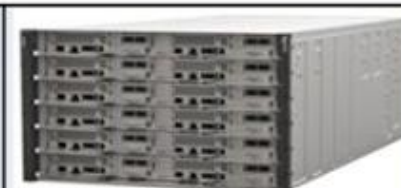|		
ThinkSystem SR630 V4 Server	ThinkSystem SR780a V3 Server	ThinkSystem DW612S Neptune DWC Enclosure
ThinkSystem Heavy Duty Full Depth Rack Cabinets	ThinkSystem SD650 Server	ThinkSystem SD650 V2 Neptune DWC Server
ThinkSystem SD650 V3 Neptune DWC Server	ThinkSystem SD650-I V3 Neptune DWC Server	ThinkSystem SD650-N V2 Neptune DWC Server
ThinkSystem SD650-N V3 Neptune DWC Server	ThinkSystem SD665 V3 Neptune DWC Server	ThinkSystem SD665-N V3 Neptune DWC Server
ThinkSystem SR630 V3 Server	ThinkSystem SR635 V3 Server	ThinkSystem SR645 V3 Server
ThinkSystem SR650 V3 Server	ThinkSystem SR670 V2 Server	ThinkSystem SR675 V3 Server