



# FlexPod Datacenter with end-to-end 100G, Cisco Intersight Managed Mode, VMware 7U3, and NetApp ONTAP 9.11

## Cisco Validated Design Summary

### Epic on FlexPod

By running an Epic environment on the FlexPod® architectural foundation, healthcare organizations can expect to see an improvement in staff productivity and a decrease in capital and operating expenses. The FlexPod Datacenter solution with Cisco UCS X-Series, VMware 7.0 U3, and NetApp® ONTAP® 9.10.1P1 for Epic Electronic Health Record (EHR) delivers several benefits specific to the healthcare industry:

### Simplified operations and lowered costs:

Eliminate the expense and complexity of legacy proprietary RISC/UNIX platforms by replacing them with a more efficient and scalable shared resource capable of supporting clinicians wherever they are. This solution delivers higher resource utilization for greater return on investment (ROI).

### Quicker deployment of infrastructure:

Whether it's in an existing data center or a remote location, the integrated and tested design of FlexPod Datacenter with Epic enables customers to have the new infrastructure up and running in less time with less effort.

### Scale-out architecture:

Scale SAN and NAS from terabytes to tens of petabytes without reconfiguring running applications.

### Nondisruptive operations:

Perform storage maintenance, hardware lifecycle operations, and software upgrades without interrupting the business.

### Secure multitenancy:

This benefit supports the increased needs of a virtualized server and storage-shared infrastructure, enabling secure multitenancy of facility-specific

information, particularly if hosting multiple instances of databases and software.

### Pooled resource optimization:

This benefit can help reduce physical server and storage controller counts, load balance workload demands, and boost utilization while improving performance.

### Quality of service (QoS):

FlexPod offers QoS on the entire stack. Industry-leading QoS storage policies enable differentiated service levels in a shared environment. These policies enable optimal performance for workloads and help in isolating and controlling runaway applications.

## Storage efficiency:

Perform storage maintenance, hardware lifecycle operations, and software upgrades without interrupting the business.

## Agility:

The industry-leading workflow automation, orchestration, and management tools offered by FlexPod systems allow IT to be far more responsive to business requests. These business requests can range from Epic backup and provisioning of additional test and training environments to analytics database replications for population health management initiatives.

## Productivity:

Quickly deploy and scale this solution for optimal clinician end-user experiences.

Like all other FlexPod solution designs, FlexPod Datacenter with Cisco UCS X-Series and Intersight is configurable according to demand and usage. Customers can purchase exactly the infrastructure they need for their



current application requirements and can then scale up by adding more resources to the FlexPod system or scale out by adding more FlexPod instances. By moving the management from the fabric interconnects into the cloud, the solution can respond to the speed and scale of customer deployments with a constant

stream of new capabilities delivered from Intersight software-as-a-service model at cloud-scale.

The Cisco Validated Design (CVD) covers best practices in terms of software versions, necessary hardware, and network design to ensure that the deployment is as seamless as possible.

**For more information, be sure to check out the Cisco Validated Design in its entirety here:**

[https://www.cisco.com/c/en/us/td/docs/unified\\_computing/ucs/UCS\\_CVDs/flexpod\\_xseries\\_vmw\\_epic.html](https://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/UCS_CVDs/flexpod_xseries_vmw_epic.html)