

Edge Compute Sizing

F5 Distributed Cloud provides edge compute capabilities through Customer Edge sites and App Stack, enabling you to run application logic closer to users.

Edge Compute Requirements

Edge Compute Use Cases

What are your edge compute requirements?

- ☒ **API processing** - Process API requests at the edge
 - ☒ **Data transformation** - Transform data before reaching origin
 - ☒ **Authentication** - Edge authentication/authorization
 - ☒ **Content personalization** - Personalize content at the edge
 - ☒ **IoT processing** - Process IoT data locally
 - ☒ **Machine learning inference** - Run ML models at the edge
 - ☒ **Real-time analytics** - Process analytics locally
 - ☒ Other: ____
-

Workload Profile

Workload Types

What types of workloads will run at the edge?

- ☒ Containers (Docker/Kubernetes)
- ☒ Virtual machines
- ☒ Serverless functions
- ☒ Custom applications

Workload Details

WORKLOAD NAME	TYPE	CPU	MEMORY	STORAGE
<div>Enter val</div>	<div><input type="checkbox"/> Container</div> <div><input type="checkbox"/> VM</div>	<div>Enter valu</div> <div>cores</div>	<div>Enter valu</div> <div>GB</div>	<div>Enter valu</div> <div>GB</div>
<div>Enter val</div>	<div><input type="checkbox"/> Container</div> <div><input type="checkbox"/> VM</div>	<div>Enter valu</div> <div>cores</div>	<div>Enter valu</div> <div>GB</div>	<div>Enter valu</div> <div>GB</div>
<div>Enter val</div>	<div><input type="checkbox"/> Container</div> <div><input type="checkbox"/> VM</div>	<div>Enter valu</div> <div>cores</div>	<div>Enter valu</div> <div>GB</div>	<div>Enter valu</div> <div>GB</div>

Workload Scaling

How should workloads scale?

- ☒ Fixed size - Manual scaling
- ☒ Horizontal auto-scaling
- ☒ Vertical scaling

Edge Locations

Edge Site Locations

Where do you need edge compute?

LOCATION	SITE TYPE	WORKLOADS
<input type="text" value="Enter value"/>	<input type="checkbox"/> Data Center <input type="checkbox"/> Branch <input type="checkbox"/> Retail <input type="checkbox"/> Other	<input type="text" value="Enter value"/>
<input type="text" value="Enter value"/>	<input type="checkbox"/> Data Center <input type="checkbox"/> Branch <input type="checkbox"/> Retail <input type="checkbox"/> Other	<input type="text" value="Enter value"/>
<input type="text" value="Enter value"/>	<input type="checkbox"/> Data Center <input type="checkbox"/> Branch <input type="checkbox"/> Retail <input type="checkbox"/> Other	<input type="text" value="Enter value"/>

Total edge compute locations: ____

Edge Infrastructure

What infrastructure is available at edge locations?

LOCATION	COMPUTE AVAILABLE	NETWORK	POWER/COOLING
<input type="text" value="Enter value"/>	<input type="checkbox"/> Servers <input type="checkbox"/> VMs <input type="checkbox"/> None	<input type="text" value="Enter value"/> Mbps	<input type="checkbox"/> Yes <input type="checkbox"/> Limited
<input type="text" value="Enter value"/>	<input type="checkbox"/> Servers <input type="checkbox"/> VMs <input type="checkbox"/> None	<input type="text" value="Enter value"/> Mbps	<input type="checkbox"/> Yes <input type="checkbox"/> Limited

App Stack Requirements

App Stack Deployment

- ☒ Yes - Managed K8s at the edge
- ☒ No - Using existing infrastructure

Container Requirements

If using containers:

PARAMETER	VALUE
Total containers	<input type="text" value="Enter value"/>
Container registry	<input type="checkbox"/> Docker Hub <input type="checkbox"/> Private <input type="checkbox"/> AWS ECR <input type="checkbox"/> Azure ACR <input type="checkbox"/> GCR
Container sizes needed	<input type="checkbox"/> Tiny <input type="checkbox"/> Medium <input type="checkbox"/> Large

Container Sizes

- **Tiny:** 0.25 vCPU, 0.5GB RAM
- **Medium:** 1 vCPU, 2GB RAM
- **Large:** 2 vCPU, 4GB RAM

Networking

Edge Network Requirements

How do edge workloads need to communicate?

- ☒ With origin/cloud services
- ☒ With other edge sites
- ☒ With local devices (IoT, sensors)
- ☒ With external APIs

Network Performance

REQUIREMENT	VALUE
Latency to local users	< <input type="text" value="Enter value"/> ms
Bandwidth to cloud	<input type="text" value="Enter value"/> Mbps
Local network bandwidth	<input type="text" value="Enter value"/> Mbps

Data Management

Data at the Edge

What data will be processed at the edge?

- ☒ User data / PII
- ☒ IoT sensor data
- ☒ Transaction data
- ☒ Log data
- ☒ Media / video

Data Residency

Are there data residency requirements?

- ☒ Yes - Data must stay in specific regions
- ☒ No

Regions with data residency requirements: ____

Edge Storage

- ☒ Yes - ____ GB per site
- ☒ No - Stateless workloads only

Summary: Edge Compute Requirements

Requirement	Value
Edge Compute Locations	<div>Enter value</div>
Total Workloads	<div>Enter value</div>
App Stack (Managed K8s)	<div><input type="checkbox"/> Yes <input type="checkbox"/> No</div>
Container Count	<div>Enter value</div>
Persistent Storage	<div><input type="checkbox"/> Yes <input type="checkbox"/> No</div>

Primary edge compute use case: