

# App Connect Sizing

F5 Distributed Cloud App Connect provides service mesh capabilities with app-to-app connectivity, service discovery, and centralized orchestration across distributed environments.

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## App Connect Requirements

### Use Cases

What App Connect capabilities do you need?

- Service discovery** - Discover services across environments
  - Service mesh** - Secure service-to-service communication
  - App migration** - Migrate apps between environments
  - Kubernetes networking** - Connect K8s clusters
  - Legacy integration** - Connect legacy and modern apps
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## Application Environment

### Application Architecture

What type of applications do you have?

- Monolithic applications
- Microservices
- Hybrid (monolith + microservices)
- Serverless / Functions
- Legacy applications

### Kubernetes Deployments

Do you have Kubernetes clusters?

- Yes

No

If yes:

CLUSTER NAME	LOCATION	DISTRIBUTION	SERVICES
Enter value	Enter value	<input type="checkbox"/> EKS <input type="checkbox"/> AKS <input type="checkbox"/> GKE <input type="checkbox"/> OpenShift <input type="checkbox"/> Other	Enter value
Enter value	Enter value	<input type="checkbox"/> EKS <input type="checkbox"/> AKS <input type="checkbox"/> GKE <input type="checkbox"/> OpenShift <input type="checkbox"/> Other	Enter value
Enter value	Enter value	<input type="checkbox"/> EKS <input type="checkbox"/> AKS <input type="checkbox"/> GKE <input type="checkbox"/> OpenShift <input type="checkbox"/> Other	Enter value

Total Kubernetes clusters: \_\_\_\_\_

## Service Inventory

How many services need connectivity?

ENVIRONMENT	SERVICE COUNT
Production	Enter value
Staging	Enter value
Development	Enter value
Total	Enter value

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## Service Discovery

### Service Discovery Requirements

What service discovery mechanisms do you use?

- Kubernetes DNS
- Consul
- DNS-based
- Static configuration
- Other: \_\_\_\_\_

### Cross-Environment Discovery

Do services need to discover services in other environments?

- Yes - Cross-cluster Kubernetes
  - Yes - Kubernetes to VM-based
  - Yes - Cloud to on-premises
  - No - Single environment only
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## Traffic Management

### Load Balancing

What load balancing is needed between services?

- Round robin
- Least connections
- Weighted distribution
- Geographic / Proximity-based

### Advanced Traffic Management

- A/B testing - Route percentage to different versions

- Canary deployments** - Gradual rollout
- Blue-green deployments** - Switch between versions
- Header-based routing** - Route based on headers
- Fault injection** - Test resilience

## Traffic Patterns

Describe service-to-service traffic patterns:

SOURCE SERVICE	DESTINATION SERVICE	RPS	LATENCY REQUIREMENT
<input type="text" value="Enter value"/>	<input type="text" value="Enter value"/>	<input type="text" value="Enter value"/>	< <input type="text" value="Enter value"/> ms
<input type="text" value="Enter value"/>	<input type="text" value="Enter value"/>	<input type="text" value="Enter value"/>	< <input type="text" value="Enter value"/> ms
<input type="text" value="Enter value"/>	<input type="text" value="Enter value"/>	<input type="text" value="Enter value"/>	< <input type="text" value="Enter value"/> ms

## Security

### Service-to-Service Security

What security is required between services?

- mTLS** - Mutual TLS authentication
- Service policies** - Allow/deny between services
- Encryption** - Encrypt all service traffic

## Policy Requirements

SOURCE	DESTINATION	ACTION	NOTES
Enter value	Enter value	<input type="checkbox"/> Allow <input type="checkbox"/> Deny	Enter value
Enter value	Enter value	<input type="checkbox"/> Allow <input type="checkbox"/> Deny	Enter value
Enter value	Enter value	<input type="checkbox"/> Allow <input type="checkbox"/> Deny	Enter value

## Identity Integration

What identity systems need integration?

- Service accounts (Kubernetes)
- OAuth/OIDC
- SPIFFE/SPIRE
- Custom certificates
- None

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## Observability

### Service Observability

What service observability do you need?

- Request tracing
- Service dependency mapping
- Traffic flow visualization
- Error rate monitoring
- Latency metrics

## Distributed Tracing

Do you use distributed tracing?

- Yes - Jaeger
  - Yes - Zipkin
  - Yes - Other: \_\_\_\_\_
  - No
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## Migration Use Cases

### Application Migration

Are you migrating applications?

- Yes - Cloud to cloud
- Yes - On-premises to cloud
- Yes - Monolith to microservices
- No

Migration details:

APPLICATION	FROM	TO	TIMELINE
Enter value	Enter value	Enter value	Enter value
Enter value	Enter value	Enter value	Enter value

## Hybrid Operation

- Yes - Active/Active across locations
  - Yes - Active/Standby failover
  - No
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## Integration

### Existing Service Mesh

Do you have an existing service mesh?

- Yes - Istio
- Yes - Linkerd
- Yes - Consul Connect
- Yes - Other: \_\_\_\_\_
- No

If yes, will you:

- Replace with F5 App Connect
- Integrate/coexist
- Migrate gradually

### F5 BIG-IP Integration

Do you have F5 BIG-IP to integrate?

- Yes - Discover BIG-IP services
  - Yes - Extend BIG-IP functionality
  - No
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### Summary: App Connect Requirements

REQUIREMENT	VALUE
<b>Total Services</b>	<input type="text" value="Enter value"/>
<b>Kubernetes Clusters</b>	<input type="text" value="Enter value"/>
<b>Cross-Environment Discovery</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>mTLS Required</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Advanced Traffic Management</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Service Migration</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Tier Required</b>	<input type="checkbox"/> Standard <input type="checkbox"/> Advanced

Service mesh diagram attached: [ ] Yes [ ] No

Additional notes:

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