

# Service Binding feature comparison

	Service Binding Spec	Service Binding Operator
Service to application binding	One-to-one	One-to-many
Environment Variables	<p>Field <b>spec.env</b></p> <p>Sets which keys from a provisioned service secret should be added to deployment as environment variables</p> <pre>env: - name: ACCOUNT_SERVICE_HOST   key: host - name: ACCOUNT_SERVICE_USERNAME   key: username - name: ACCOUNT_SERVICE_PASSWORD   key: password - name: ACCOUNT_SERVICE_URI   key: accountServiceUri</pre> <p>The name is variable name inside a pod, key is a field to map to inside the binding secret</p>	<p>Environment variables are added always to workload from the secret</p> <p>Additionally has <b>spec.envVarPrefix</b> setting to add to each environment variable</p> <p>Can generate environment variables from service workload or CR using <b>spec.CustomEnvVar</b></p> <pre>- name: DB_PASSWORD   value: '{{ .postgresDB.status.dbCredentials.password }}'</pre>
Variable Mapping	<p><b>spec.mappings</b> (Go templates)</p> <p>The executed output of the template <b>MUST</b> be added to the Secret exposed to the resource represented by application as the key specified by the name of the Mapping</p> <pre>mappings: - name: accountServiceUri   value: https://{{ urlquery .username }}:{{ urlquery .password }}@{{ .host }}:{{ .port }}</pre>	N/A

Application Selector	<p>Label Selector or a selector that has apiVersion (group + version), Kind and a name</p> <pre> application:      # ObjectReference-like apiVersion:      # string kind:            # string name:            # string, mutually exclusive with selector selector:        # metav1.LabelSelector, mutually exclusive with name containers:      # []intstr.IntOrString, optional </pre> <p>Example;</p> <pre> application:   apiVersion: apps/v1   kind:      Deployment   name:      online-banking </pre> <p>Can specify a container to be mounted to using <b>containers</b> array</p>	<p>Label Selector or a selector that has resourceRef (name), group, version and resource (kind)</p> <p>Example:</p> <pre> applicationSelector:   resourceRef: node-todo-git   group: apps   version: v1   resource: deployments </pre> <p><b>bindingPath</b> object can be used to customize where in application workload schema the binding will be performed. Can be used specify path to Container spec within workload</p>
Service Selector	<p>Single service selector</p> <pre> service:   apiVersion: com.example/v1alpha1   kind:      AccountService   name:      prod-account-service </pre> <p>Selector has apiVersion (group + version), kind and a name</p>	<p>Array of service selectors:</p> <pre> backingServiceSelectors: - group: postgresql.baiju.dev   version: v1alpha1   kind: Database   resourceRef: db-demo - group: etcd.database.coreos.com   version: v1beta2   kind: EtcdCluster   resourceRef: etcd-demo </pre> <p>Each selector has name (resourceRef) , group, version and kind</p> <p>Allows binding services across namespaces using namespace field</p>
Provisioned Service Secret	<p>Secret must be volume mounted</p>	<p>Adds binding information as environment variables by default, Secret could be volume mounted through use of annotations or x-descriptor</p>

Volume Mounting	Must be mounted at \$SERVICE_BINDING_ROOT/< binding-name>/	<b>spec.volumeMountPrefix</b> is used to add a prefix to a volume mount location path
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### Spec Extensions:

Custom application projection:

When **projection.service.binding/type** annotations set to **Custom**

The projection of secret into the application is not handles by service binding implementation but is handled by the consumer through ServiceBindingProjection CRD