

## Configuring Virtual BGFs to Run on Services PICs

By default virtual BGFs run on the Routing Engine. If you plan to run virtual BGFs on MultiServices PICs or MultiServices Dense Port Concentrators (MS-DPC) instead of on the Routing Engine, you need to enable the BGF service package on each PIC or DPC and then configure the service interface that you want to run the `pgcpd` process.

This topic includes the following tasks:

- Enabling the BGF Service Package on the PIC or DPC on page 1
- Configuring the Control Services PIC or DPC for the Virtual BGF on page 2

### Enabling the BGF Service Package on the PIC or DPC

To enable the BGF service package on a PIC or DPC:

1. Determine the FPC slot number and the PIC number of the services PIC or DPC on which you want to enable the BGF service package.

In the following example, the FPC slot number is 0 and the PIC number is 3.

```
user@host> show chassis hardware
Hardware inventory:
Item          Version  Part number  Serial number  Description
.
.
.
FPC 0
PIC 0         REV 11   750-002971  RH1375        4x OC-3 SONET, MM
PIC 1         REV 12   750-012838  DN0449        4x 1GE(LAN), IQ2
Xcvr 0        REV 01   740-013111  8142659       SFP-T
Xcvr 1        REV 01   740-013111  8142630       SFP-T
Xcvr 2        REV 01   740-013111  8155199       SFP-T
Xcvr 3        REV 01   740-013111  8154799       SFP-T
PIC 2         REV 11   750-005724  RH2051        2x OC-3 ATM-II IQ, MM
PIC 3         REV 15   750-014895  DN3277        MultiServices 100
.
.
.
```

2. Enable the `jservices-bgf` package on the PIC or DPC.

```
[edit chassis]
user@host# set fpc 0 pic 3 adaptive-services service-package extension-provider
package jservices-bgf
```

3. Set the number of megabytes that can be used for the wired process memory, which is virtual memory used to reduce Block Translation Look-aside Buffer (BTLB) misses, to 512.

```
[edit chassis]
user@host# set fpc 0 pic 3 adaptive-services service-package extension-provider
wired-process-mem-size 512
```

4. Set the maximum number of processes that can run simultaneously to 8.

```
[edit chassis]
user@host# set fpc 0 pic 3 adaptive-services service-package extension-provider
wired-max-processes 512
```



**NOTE:** The option `wired-process-mem-size` does not auto-complete when you enter it in the CLI. You must enter all of the characters.

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5. Set the number of processing cores dedicated to the control functionality of the `jservices-bgf` application.

```
[edit chassis]
user@host# set fpc 0 pic 3 adaptive-services service-package extension-provider
control-cores 7
```

6. Specify that the PIC or DPC not restart if the Routing Engine is swapped.

```
[edit chassis]
user@host# set no-service-pic-restart-on-failover
```

7. Commit your configuration changes. You must perform the commit before you can proceed to configure the BGF.

```
[edit]
user@host# commit
commit complete
```

## **Configuring the Control Services PIC or DPC for the Virtual BGF**

To run the virtual BGF on a MultiServices PIC or MS-DPC, configure the service interface that you want to run the `pgcpd` process:

1. Enter edit mode for the interface.

```
[edit]
user@host# edit interfaces ms-0/3/0
```

2. Configure a description for the interface.

```
[edit interfaces ms-0/3/0]
user@host# set description BGF-Service-PIC
```

3. Configure logical unit 0, and specify the protocol family and the address of a virtual BGF.

```
[edit interfaces ms-0/3/0]
user@host# set unit 0 family inet address 10.10.200.21/32
```

4. Configure a logical unit and specify the protocol family.

```
[edit interfaces ms-0/3/0]
user@host# set unit 10 family inet
```

5. Configure a logical unit and specify the protocol family.

```
[edit interfaces ms-0/3/0]  
user@host# set unit 20 family inet
```

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