



O P E N P O R TTM
technology

IPLP Application Note:
**IPLP HIVE SETTINGS FOR TWO
NICs**

Version 3

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IPLP HIVE SETTINGS FOR TWO NICs

This document provides information for creating hive configurations that will provide IPLP services in a system with two Network Interface Cards (NICs).

About This Document

This document contains the following sections:

Specifying Network Interfaces *page 5* Overview of the parameters used to specify a network interface in IP LaunchPad.

Install the Second NIC *page 8* Requirements connected twith the installation of the second NIC.

Run One Service Through a Second NIC *page 9* Instructions for reconfiguring IP LaunchPad to run an existing service through a second NIC, instead of the original NIC.

Run One Service Through Two NICs *page 16* Instructions for reconfiguring IP LaunchPad to run an existing service through two NICs.

Specifying Network Interfaces

Any IP LaunchPad module that deals directly with the network must have one or more "sockets" or network interfaces created for it. A network interface requires the following:

- A dispatcher within IP LaunchPad.
- A host and port to bind to.

These components are configured in the IP LaunchPad "Hive" file that stores settings for the module.

Within an IP LaunchPad Hive file, each module or service is associated with a "class" which ultimately identifies what part of the IP LaunchPad code library is run to perform the functions of this module or service. In addition, each module, service and class is assigned a unique identifier called a GUID.

In order for IP LaunchPad to set up and use a network interface for a module, the following elements must be defined in the Hive file for that module:

- **Network Interface GUID** One entry must define the GUID for the network interface.
- **Network Interface Class GUID** One entry must define the GUID for the network interface's class.
- **Class Binding** One entry must identify which entry in the code library is to be associated with the network interface's class.
- **Network Interface Specification** One entry must explicitly set up the network interface as a service that the module can use.
- **Network Interface Configuration Binding** One entry must bind the network interface to a specific host and port.
- **Dispatcher Configuration** One entry must specify that the Network Interface Class already defined is to act as a dispatcher for the network interface.

In the standard configuration, these entries are created automatically by the IPLPCfg script. The only time a System Administrator has to worry about these settings is when trying to set up IP LaunchPad to work with a special hardware configuration--for example, when configuring the software on a server with two Network Interface Cards (NICs).

IPLP Hive Settings for two NICs

Specifying Network Interfaces

IP LaunchPad Modules That Use Network Interfaces

The following IP LaunchPad modules use network interfaces:

IPLP Module	Configured in:
SuperDispatcher Routes traffic for all other modules (except LogServer).	Hive-Superdispatcher.txt
LogServer For log message queries and transmission.	Hive-Logserver.txt

In a typical IP LaunchPad installation, the services that act as network interfaces are named as such. Examples:

No other IP LaunchPad module can be configured to use a second NIC. The instructions in this Application Note do not apply to any other Hive file.

For SuperDispatcher:

- NetworkInterfaceEverythingTCP
- NetworkInterfaceMessagingTCP
- NetworkInterfaceAdminTCP

For LogServer:

- LogServerTcpInterface
- LogServerUnixInterface
- LogServerSSLInterface

Special Case: Server with Two NICs

After a second network interface card is installed in an IP LaunchPad server, it can be given a second host name. There are two ways in which can make use of a second NIC:

- Any IP LaunchPad service that uses a network interface can be configured to "listen" for traffic coming through the second NIC. See page 9 for instructions.
- Any IP LaunchPad that uses a network interface can be configured to use both NICs at the same time. See page 16 for instructions.

This document provides instructions for both special configurations.

Install the Second NIC

Before reconfiguring IP LaunchPad, it is necessary to install the second NIC. Refer to the hardware instructions to do this.

Two important points about this installation:

- IP LaunchPad will consider the first NIC to be the default. In Hive files, its hostname can be referenced as *localhost* or with a single period.
- The installation process for the second NIC will include the specification of a second hostname/IP address. This host specification must be used explicitly in any Hive file configuration line.

Run One Service Through a Second NIC

To do this, it is only necessary to change the service's Network Interface Configuration Binding to "point to" a different hostname.

Information Needed

This process requires the following information:

- The name of the service to be run through the second NIC.

See IP LaunchPad Modules That Use Network Interfaces on page 6 for a list of typical services that act as network interfaces.

- The hostname for the second NIC.

To change the configuration:

Open the Hive File

1. Log in to the IP LaunchPad server as root.
2. If IP LaunchPad is running on the server, shut it down.
3. Open one of the following files in vi or some other text editor:
 - `/etc/h5/hive/Hive-SuperDispatcher.txt`
 - `/etc/h5/hive/Hive-LogServer.txt`

IPLP Hive Settings for two NICs

Run One Service Through a Second NIC

Change the Configuration

4. Find the configuration line with the following format:

```
 ${RTE1}/Servers/Service_id/Binding string stype://.:port_id
```

where

Service_id is the identifier of the network interface service

stype identifies the type of interface (unix).

port_id identifies the port

In this line, as in other hive configuration lines, the required Service_id is the GUID of the network interface service. The hive files specify all GUIDs at the top of the file, in define statements that map them to variable names that are marked by a dollar sign at the beginning and set enclosed in curly brackets. The port_id is also represented by a similar variable name. See page 11 for specific examples.

In this line, the period between the // characters and the colon (:) in front of the *port_id* stands for the default host name (that is, the hostname associated with the first Network Interface Card).

5. Replace the period just described with the name or IP address of the second NIC. The line as edited should be in the following format:

```
 ${RTE1}/Servers/Service_id/Binding string stype://hostname:port_id
```

where

hostname is the second NIC's host name or IP address.

The port_id can also be changed if desired.

IMPORTANT: When adding new configuration lines in any Hive file, be very careful to preserve the tabs as they are in existing lines. The tab characters serve as important delimiters in the line.

Resave the Hive File

6. Save the hive file as you exit the text editor.
7. Restart IP LaunchPad.

Example: One Service Through the Second NIC

In the following example, a second network card has been added to an IP LaunchPad server, and configured with the hostname *secondary.resell.com*. The service NetworkInterfaceAdminTCP, a service for the IP LaunchPad SuperDispatcher, has been reconfigured to send and receive traffic through the second NIC. This reconfiguration has been done by editing the file *Hive-SuperDispatcher.txt*.

The following pages present:

- The original version of *Hive-SuperDispatcher.txt*.
- A revised *Hive-SuperDispatcher.txt*, with the changes in boldfaced text.

IPLP Hive Settings for two NICs

Run One Service Through a Second NIC

Original *Hive-SuperDispatcher.txt*

```
-----  
# Hive definitions for the Super Dispatcher  
# -----  
  
define SuperDispatcherMODID {00000014-3640-11D2-BBEB-006008D25009}  
define SuperDispatcherCLSID {D79FDD0A-243B-11d3-BD0F-00C04F9918E7}  
  
define NetworkInterfaceEverythingCLSID {D79FDD0B-243B-11d3-BD0F-  
00C04F9918E7}  
define NetworkInterfaceEverythingTCP {87AAAAAA-0000-11D2-92CD-  
0060974FE023}  
define NetworkInterfaceMessagingCLSID {D79FDD0C-243B-11d3-BD0F-  
00C04F9918E7}  
define NetworkInterfaceMessagingTCP {87AAAAAB-0000-11D2-92CD-0060974FE023}  
define NetworkInterfaceAdminCLSID {D79FDD0D-243B-11d3-BD0F-00C04F9918E7}  
define NetworkInterfaceAdminTCP {87AAAAAC-0000-11D2-92CD-0060974FE023}  
  
# SuperDispatcher bindings  
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Library string  
    ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Id string Open Port  
    Super Dispatcher Implementation  
Classes/CLSID/${NetworkInterfaceEverythingCLSID}/InProcServer32/Library  
    string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${NetworkInterfaceEverythingCLSID}/InProcServer32/Id string  
    Open Port Network Interface Everything  
Classes/CLSID/${NetworkInterfaceMessagingCLSID}/InProcServer32/Library  
    string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${NetworkInterfaceMessagingCLSID}/InProcServer32/Id string  
    Open Port Network Interface Messaging  
Classes/CLSID/${NetworkInterfaceAdminCLSID}/InProcServer32/Library string  
    ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${NetworkInterfaceAdminCLSID}/InProcServer32/Id string Open  
    Port Network Interface Admin  
  
${RTE1}/Modules/Classes/${SuperDispatcherMODID} string  
    ${SuperDispatcherCLSID}  
  
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring  
    ${NetworkInterfaceEverythingTCP}  
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+  
    ${NetworkInterfaceMessagingTCP}  
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+  
    ${NetworkInterfaceAdminTCP}
```

IPLP Hive Settings for two NICs

Run One Service Through a Second NIC

```
# Network Interface Configs
#
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/Binding      string    tcp://
.::${EVERYTHING_PORT}
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/DispatcherCLSID   string
${NetworkInterfaceEverythingCLSID}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/Binding      string    tcp://
.::${MESSAGING_PORT}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/DispatcherCLSID   string
${NetworkInterfaceMessagingCLSID}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/Binding      string    tcp://
.::${ADMIN_PORT}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/DispatcherCLSID   string
${NetworkInterfaceAdminCLSID}

# Use these as the defaults for remote logins
#
${PRODUCT}/Global/Proxies/Default/Login/UserName    string    system
${PRODUCT}/Global/Proxies/Default/Login/UserRealm   string    atg.openport.com
${PRODUCT}/Global/Proxies/Default/Login>Password    string    Frontline

# Add the Client Access Manager to the Load list
${RTE1}/Modules/Load    mstring+   ${SuperDispatcherMODID}
```

IPLP Hive Settings for two NICs

Run One Service Through a Second NIC

Revised Hive-SuperDispatcher.txt

```
-----  
# Hive definitions for the Super Dispatcher  
# -----  
  
define SuperDispatcherMODID {00000014-3640-11D2-BBEB-006008D25009}  
define SuperDispatcherCLSID {D79FDD0A-243B-11d3-BD0F-00C04F9918E7}  
  
define NetworkInterfaceEverythingCLSID {D79FDD0B-243B-11d3-BD0F-  
00C04F9918E7}  
define NetworkInterfaceEverythingTCP {87AAAAAA-0000-11D2-92CD-  
0060974FE023}  
define NetworkInterfaceMessagingCLSID {D79FDD0C-243B-11d3-BD0F-  
00C04F9918E7}  
define NetworkInterfaceMessagingTCP {87AAAAAB-0000-11D2-92CD-0060974FE023}  
define NetworkInterfaceAdminCLSID {D79FDD0D-243B-11d3-BD0F-00C04F9918E7}  
define NetworkInterfaceAdminTCP {87AAAAAC-0000-11D2-92CD-0060974FE023}  
  
# SuperDispatcher bindings  
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Library string  
    ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Id string Open Port  
    Super Dispatcher Implementation  
Classes/CLSID/${NetworkInterfaceEverythingCLSID}/InProcServer32/Library  
    string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${NetworkInterfaceEverythingCLSID}/InProcServer32/Id string  
    Open Port Network Interface Everything  
Classes/CLSID/${NetworkInterfaceMessagingCLSID}/InProcServer32/Library  
    string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${NetworkInterfaceMessagingCLSID}/InProcServer32/Id string  
    Open Port Network Interface Messaging  
Classes/CLSID/${NetworkInterfaceAdminCLSID}/InProcServer32/Library string  
    ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}  
Classes/CLSID/${NetworkInterfaceAdminCLSID}/InProcServer32/Id string Open  
    Port Network Interface Admin  
  
${RTE1}/Modules/Classes/${SuperDispatcherMODID} string  
    ${SuperDispatcherCLSID}  
  
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring  
    ${NetworkInterfaceEverythingTCP}  
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+  
    ${NetworkInterfaceMessagingTCP}  
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+  
    ${NetworkInterfaceAdminTCP}
```

IPLP Hive Settings for two NICs

Run One Service Through a Second NIC

```
# Network Interface Configs
#
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/Binding      string    tcp://
.::${EVERYTHING_PORT}
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/DispatcherCLSID   string
${NetworkInterfaceEverythingCLSID}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/Binding      string    tcp://
.::${MESSAGING_PORT}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/DispatcherCLSID   string
${NetworkInterfaceMessagingCLSID}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/Binding      string    tcp://
secondary.resell.com:${ADMIN_PORT}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/DispatcherCLSID   string
${NetworkInterfaceAdminCLSID}

# Use these as the defaults for remote logins
#
${PRODUCT}/Global/Proxies/Default/Login/UserName    string    system
${PRODUCT}/Global/Proxies/Default/Login/UserRealm   string    atg.openport.com
${PRODUCT}/Global/Proxies/Default/Login/Password    string    Frontline

# Add the Client Access Manager to the Load list
${RTE1}/Modules/Load    mstring+   ${SuperDispatcherMODID}
```

IPLP Hive Settings for two NICs

Run One Service Through Two NICs

Run One Service Through Two NICs

In some situations, it may be desirable to run the same service over both NICs. (Example: it may be desirable to allow access to some administrative functions through two separate network interfaces--one inside a firewall, one outside.) To configure IP LaunchPad to do this, it is necessary to:

- Define a new **Network Interface GUID** for a second version of the network interface service (since each service can bind to one and only one host).
- Enter a new **Network Interface Specification** to identify the second version of the network interface as a valid resource for the module.
- Define a new **Network Interface Configuration Binding** to point to the new host.
- Add a new **Dispatcher Configuration** entry that maps the second version of the service to the same dispatcher used by the first.

Instructions for these tasks follow.

Open the Hive File

1. Log in to the IP LaunchPad server as `root`.
2. If IP LaunchPad is running on the server, shut it down.
3. Open one of the following files in *vi* or some other text editor:
 - `/etc/h5/hive/Hive-SuperDispatcher.txt`
 - `/etc/h5/hive/Hive-LogServer.txt`

Define a new Network Interface GUID

4. At the top of the file, find the `define` statement that identifies the service that you want to export to both NICs. In a typical IP LaunchPad installation, it could be one of the following:

In *Hive-SuperDispatcher.txt*:

```
define NetworkInterfaceEverythingTCP {GUID}  
define NetworkInterfaceMessagingTCP {GUID}  
define NetworkInterfaceAdminTCP {GUID}
```

In *Hive-LogServer.txt*:

```
define LogServerTcpInterface {GUID}  
define LogServerUnixInterface {GUID}  
define LogServerSSLInterface {GUID}
```

Where *GUID* is a unique ID consisting of 32 hexadecimal digits separated by hyphens into groups of 8, 4, 4, 4 and 12.

5. Duplicate this line and make the following changes in the duplicate:
 - Change the name that follows the word `define`. (The easiest way to do this is to add a word like `New` or the number `2` after the existing name.)
 - Substitute a new *GUID* in place of the original.

This GUID does not refer to any pre-existing numbering scheme. The most important requirement is that it is unique. In most cases, you can create a unique GUID from an existing GUID by changing the last digit in the first group of 8 digits.

IMPORTANT: When adding new configuration lines in any Hive file, be very careful to preserve the tabs as they are in existing lines. The tab characters serve as important delimiters in the line.

IPLP Hive Settings for two NICs

Run One Service Through Two NICs

Enter a new Network Interface Specification

6. Find the group of network interface declarations. These lines will resemble the following samples:

```
 ${RTE1}/Classes/${mod_id}/NetworkInterfaces    mstring      ${Service_id}  
 ${RTE1}/Classes/${mod_id}/NetworkInterfaces    mstring+     ${Service_id}  
 ${RTE1}/Classes/${mod_id}/NetworkInterfaces    mstring+     ${Service_id}
```

where:

mod_id identifies the module for which these network interfaces are being defined.

Service_id is the identifier of the network interface service

In this line, as in other hive configuration lines, the mod_id is the GUID of the module or the module class, and Service_id is the GUID of the network interface service. The hive files specify all GUIDs at the top of the file, in define statements that map them to variable names that are marked by a dollar sign at the beginning and set enclosed in curly brackets. See page 20 for specific examples.

7. Copy one of these lines and paste the copy after the originals.
8. Make the following changes in the new line:
 - If the word *mstring* between the two tabs is NOT followed by a plus sign (+), add one.
 - Replace the *Service_id* with the name you defined in Step 5 above.

IMPORTANT: When adding new configuration lines in any Hive file, be very careful to preserve the tabs as they are in existing lines. The tab characters serve as important delimiters in the line.

Add a new Network Interface Configuration Binding and Dispatcher Configuration

9. Find the network interface configuration lines for the service that you want to export over two NICs. Each network interface service will have two configuration lines, like the following samples:

```
 ${RTE1}/Servers/${Service_id}/Binding    string    $type://hostname:$port_id  
 ${RTE1}/Servers/${Service_id}/DispatcherCLSID   string    ${Service_class}
```

where:

Service_id is the identifier of the network interface service.

stype identifies the type of interface (tcp or unix).

hostname is the host name of the default NIC. (In the existing line, the hostname may be represented by a single period.)

port_id identifies the port.

Service_class identifies the class associated with the network interface service.

In these lines, as in other hive configuration lines, the Service_id is the GUID of the module or the module class, and Service_Class_id is the GUID of the corresponding class. The hive files specify all GUIDs at the top of the file, in define statements that map them to variable names that are marked by a dollar sign at the beginning and set enclosed in curly brackets. See page 20 for specific examples.

10. Copy these two lines and paste the copies below the originals.

11. Make the following changes in the first copied line:

- Replace the *Service_id* with the name you defined in Step 5 above.
- Replace the *hostname* with the name or IP address of the second NIC.
- If necessary, replace the *port_id* with a different port number.

12. Make the following changes in the first copied line:

- Replace the *Service_id* with the name you defined in Step 5 above.

IMPORTANT: When adding new configuration lines in any Hive file, be very careful to preserve the tabs as they are in existing lines. The tab characters serve as important delimiters in the line.

IPLP Hive Settings for two NICs

Run One Service Through Two NICs

Resave the Hive File

13. Save the hive file as you exit the text editor.

14. Restart IP LaunchPad.

Example: One Service Through Two NICs

In the following example, a second network card has been added to an IP LaunchPad server, and configured with the hostname *secondary.resell.com*. The service NetworkInterfaceAdminTCP, a service for the IP LaunchPad SuperDispatcher, has been reconfigured to send and receive traffic through BOTH the original NIC AND the second NIC. This reconfiguration has been done by editing the file *Hive-SuperDispatcher.txt*.

The following pages present:

- The original version of *Hive-SuperDispatcher.txt*.
- A revised *Hive-SuperDispatcher.txt*, with the changes in boldfaced text.

Original *Hive-SuperDispatcher.txt*

```
-----
# Hive definitions for the Super Dispatcher
# -----


define SuperDispatcherMODID {00000014-3640-11D2-BBEB-006008D25009}
define SuperDispatcherCLSID {D79FDD0A-243B-11d3-BD0F-00C04F9918E7}

define NetworkInterfaceEverythingCLSID {D79FDD0B-243B-11d3-BD0F-
00C04F9918E7}
define NetworkInterfaceEverythingTCP {87AAAAAA-0000-11D2-92CD-
0060974FE023}
define NetworkInterfaceMessagingCLSID {D79FDD0C-243B-11d3-BD0F-
00C04F9918E7}
define NetworkInterfaceMessagingTCP {87AAAAAB-0000-11D2-92CD-0060974FE023}
define NetworkInterfaceAdminCLSID {D79FDD0D-243B-11d3-BD0F-00C04F9918E7}
define NetworkInterfaceAdminTCP {87AAAAAC-0000-11D2-92CD-0060974FE023}

# SuperDispatcher bindings
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Library string
${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Id string Open Port
    Super Dispatcher Implementation
Classes/CLSID/${NetworkInterfaceEverythingCLSID}/InProcServer32/Library
    string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${NetworkInterfaceEverythingCLSID}/InProcServer32/Id string
    Open Port Network Interface Everything
Classes/CLSID/${NetworkInterfaceMessagingCLSID}/InProcServer32/Library
    string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${NetworkInterfaceMessagingCLSID}/InProcServer32/Id string
    Open Port Network Interface Messaging
Classes/CLSID/${NetworkInterfaceAdminCLSID}/InProcServer32/Library string
${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${NetworkInterfaceAdminCLSID}/InProcServer32/Id string Open
    Port Network Interface Admin

${RTE1}/Modules/Classes/${SuperDispatcherMODID} string
${SuperDispatcherCLSID}

${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring
${NetworkInterfaceEverythingTCP}
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+
${NetworkInterfaceMessagingTCP}
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+
${NetworkInterfaceAdminTCP}
```

IPLP Hive Settings for two NICs

Run One Service Through Two NICs

```
# Network Interface Configs
#
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/Binding      string    tcp://
.::${EVERYTHING_PORT}
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/DispatcherCLSID   string
${NetworkInterfaceEverythingCLSID}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/Binding      string    tcp://
.::${MESSAGING_PORT}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/DispatcherCLSID   string
${NetworkInterfaceMessagingCLSID}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/Binding      string    tcp://
.::${ADMIN_PORT}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/DispatcherCLSID   string
${NetworkInterfaceAdminCLSID}

# Use these as the defaults for remote logins
#
${PRODUCT}/Global/Proxies/Default/Login/UserName    string    system
${PRODUCT}/Global/Proxies/Default/Login/UserRealm   string    atg.openport.com
${PRODUCT}/Global/Proxies/Default/Login/Password    string    Frontline

# Add the Client Access Manager to the Load list
${RTE1}/Modules/Load    mstring+   ${SuperDispatcherMODID}
```

Revised Hive-SuperDispatcher.txt

```
-----
# Hive definitions for the Super Dispatcher
# -----



define SuperDispatcherMODID {00000014-3640-11D2-BBEB-006008D25009}
define SuperDispatcherCLSID {D79FDD0A-243B-11d3-BD0F-00C04F9918E7}

define NetworkInterfaceEverythingCSRID {D79FDD0B-243B-11d3-BD0F-
00C04F9918E7}
define NetworkInterfaceEverythingTCP {87AAAAAA-0000-11D2-92CD-
0060974FE023}
define NetworkInterfaceMessagingCSRID {D79FDD0C-243B-11d3-BD0F-
00C04F9918E7}
define NetworkInterfaceMessagingTCP {87AAAAAB-0000-11D2-92CD-0060974FE023}
define NetworkInterfaceAdminCSRID {D79FDD0D-243B-11d3-BD0F-00C04F9918E7}
define NetworkInterfaceAdminTCP {87AAAAAC-0000-11D2-92CD-0060974FE023}
define NetworkInterfaceAdminTCPNew {87AAAAAZ-0000-11D2-92CD-0060974FE023}

# SuperDispatcher bindings
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Library string
${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${SuperDispatcherCLSID}/InProcServer32/Id string Open Port
Super Dispatcher Implementation
Classes/CLSID/${NetworkInterfaceEverythingCSRID}/InProcServer32/Library
string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${NetworkInterfaceEverythingCSRID}/InProcServer32/Id string
Open Port Network Interface Everything
Classes/CLSID/${NetworkInterfaceMessagingCSRID}/InProcServer32/Library
string ${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${NetworkInterfaceMessagingCSRID}/InProcServer32/Id string
Open Port Network Interface Messaging
Classes/CLSID/${NetworkInterfaceAdminCSRID}/InProcServer32/Library string
${OPTLIBDIR}/OptDispatcher${D}-1.0.0${SO_EXT}
Classes/CLSID/${NetworkInterfaceAdminCSRID}/InProcServer32/Id string Open
Port Network Interface Admin

${RTE1}/Modules/Classes/${SuperDispatcherMODID} string
${SuperDispatcherCLSID}

${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring
${NetworkInterfaceEverythingTCP}
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+
${NetworkInterfaceMessagingTCP}
${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+
${NetworkInterfaceAdminTCP}
 ${RTE1}/Classes/${SuperDispatcherCLSID}/NetworkInterfaces mstring+
${NetworkInterfaceAdminTCPNew}
```

IPLP Hive Settings for two NICs

Run One Service Through Two NICs

```
# Network Interface Configs
#
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/Binding      string    tcp://
.::${EVERYTHING_PORT}
${RTE1}/Servers/${NetworkInterfaceEverythingTCP}/DispatcherCLSID   string
${NetworkInterfaceEverythingCLSID}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/Binding      string    tcp://
.::${MESSAGING_PORT}
${RTE1}/Servers/${NetworkInterfaceMessagingTCP}/DispatcherCLSID   string
${NetworkInterfaceMessagingCLSID}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/Binding      string    tcp://
.::${ADMIN_PORT}
${RTE1}/Servers/${NetworkInterfaceAdminTCP}/DispatcherCLSID   string
${NetworkInterfaceAdminCLSID}
${RTE1}/Servers/${NetworkInterfaceAdminTCPNew}/Binding      string    tcp://
secondary.resell.com:${ADMIN_PORT}
${RTE1}/Servers/${NetworkInterfaceAdminTCPNew}/DispatcherCLSID   string
${NetworkInterfaceAdminCLSID}

# Use these as the defaults for remote logins
#
${PRODUCT}/Global/Proxies/Default/Login/UserName    string    system
${PRODUCT}/Global/Proxies/Default/Login/UserRealm   string    atg.openport.com
${PRODUCT}/Global/Proxies/Default/Login>Password    string    Frontline

# Add the Client Access Manager to the Load list
${RTE1}/Modules/Load    mstring+   ${SuperDispatcherMODID}
```