

# OpenRTM-aist (C++) - #1055

NIC CORBA IOR

01/10/2010 12:07 AM - n-ando

<b>Status:</b>		<b>Start date:</b>	01/10/2010
<b>Priority:</b>		<b>Due date:</b>	
<b>Assignee:</b>	n-ando	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>IOR  corba.endpoint  IOR</p>			
<b>Related issues:</b>			
<p>Related to OpenRTM-aist (Java) - #1271: NIC CORBA IOR 02/23/2010</p>			

## History

### #1 - 01/10/2010 12:19 AM - n-ando

IOR omniorb

- endPoint giop:tcp:<host>:port ( -ORBEndPoint giop:tcp:<host>:port ) IOR
- endPointPublishAllIFs = 1 ( -ORBEndPointPublishAllIFs 1 ) IOR
- omniorb4.1.\* \* endPointPublish all(addr) endPointPublishAllIFs = 1

<http://omniorb.sourceforge.net/omni40/omniorb/omniorb008.html>

<http://omniorb.sourceforge.net/omni41/omniorb/omniorb008.html#toc42>

1. rtc.conf corba.args -ORBEndPointPublishAllIFs 1  
RTSE DnD Activate/Inactivate
2. rtc.conf corba.args -ORBEndPoint (2) Activate/Inactivate

<http://java.sun.com/j2se/1.4.2/docs/guide/idl/jidlNaming.html>

- Interoperable Object References (IOR)  
An IOR is an object reference that is understood by ORBs that can interoperate using the OMG-defined protocols GIOP and IIOP. A client can obtain an object reference using orb.object\_to\_string(objRef), as shown in the Browsing the Namespace example, or as a result of an invocation on another object reference.

**Note:** If an IOR contains multiple profiles, the J2SE v.1.4 ORB always uses the first one.

#2 - 01/11/2010 10:36 AM - n-ando

<http://old.nabble.com/More-endPoint-questions-td6425783.html>

encodeIOR

os

#3 - 01/11/2010 11:57 PM - n-ando

- % Done changed from 0 to 50

- UNIX
  - (AF\_ROUTE) sysctl (AF\_ROUTE)
- Windows
  - GetBestInterface() API

root setuid

UNIX route (Linux ip)

```
freebsd> route get 192.168.111.1
route to: 192.168.111.1
destination: 192.168.111.1
interface: le0
flags: <UP,HOST,DONE,LLINFO,WASCLONED>
recvpipe  sendpipe  ssthresh  rtt,msec  rttvar  hopcount  mtu  expire
0          0          0          0          0        0          1500  1112
```

```
linux$ ip route get 192.168.111.1
192.168.111.1 dev eth0 src 192.168.111.130
cache mtu 1500 advmss 1460 hoplimit 64
```

(le0)

coil

```
/*!
 * @if jp
 * @brief
 * @else
 * @brief Getting network interface name from destination address
 * @endif
 */
bool dest_to_endpoint(std::string dest_addr, std::string& endpoint)
```

posix route(ip) Windows GetBestInterface

#4 - 01/12/2010 12:12 AM - n-ando

- % Done changed from 50 to 100

dest\_to\_endpoint   
 dest\_to\_endpoint

IORomniORB CORBA\_IORUtil::replaceEndpoint()   
 IOR

```
Jan 10 17:03:04 DEBUG: NamingOnCorba: Original IOR information:
IOR information
Type ID: "IDL:openrtm.aist.go.jp/OpenRTM/DataFlowComponent:1.0"
Profiles:
  1. IIOP 1.2 192.168.111.128 2810
    POA(root)      Object Key: "...." = 0x00000000 (4 bytes)
    Object Key: "...IK..t:....." = 0xfeb889494b0000743a0000000000 (14 bytes)
    TAG_ORB_TYPE  omniORB
    TAG_CODE_SETS char native code set: ISO-8859-1
                   char conversion code set: UTF-8
                   wchar native code set: UTF-16
                   wchar conversion code set: UTF-16
```

```
Jan 10 17:03:04 TRACE: manager: Manager::getORB()
Jan 10 17:03:04 DEBUG: NamingOnCorba: Modified IOR information]
IOR information
Type ID: "IDL:openrtm.aist.go.jp/OpenRTM/DataFlowComponent:1.0"
Profiles:
  1. IIOP 1.2 192.168.116.129 2810
    POA(root)      Object Key: "...." = 0x00000000 (4 bytes)
    Object Key: "...IK..t:....." = 0xfeb889494b0000743a0000000000 (14 bytes)
    TAG_ORB_TYPE  omniORB
    TAG_CODE_SETS char native code set: ISO-8859-1
                   char conversion code set: UTF-8
                   wchar native code set: UTF-16
                   wchar conversion code set: UTF-16
```

192.168.111.128 192.168.116.129

