

ID	TSS001362	Creation date	May 12, 2009
Platform	S60 3rd Edition, FP1 S60 3rd Edition, FP2	Devices	Nokia E61, Nokia N78, Nokia E66, Nokia N95
Category	Symbian C++	Subcategory	Networking

Keywords (APIs, classes, methods, functions): KSoIp6MulticastLoop, KSoIp6MulticastHops

Description

Multicast addressing is a network technology for delivering information to a group of destinations simultaneously using the most efficient strategy to deliver the messages over each link of the network only once, creating copies only when the links to the multiple destinations split.

Nokia devices can receive multicast streams by connecting to the network of the streaming PC through WLAN and sending a *join* message to the multicast group address. Once a phone joins the multicast stream, the streaming packets can be received on the local port provided along with the multicast address.

Solution

Joining a multicast stream:

```
User::LeaveIfError(iSocketServ.Connect());
RConnection connection;
User::LeaveIfError( connection.Open( iSession, KConnectionTypeDefault ) );
User::LeaveIfError( connection.Start() );
User::LeaveIfError(iSocket.Open(iSession, KAFInet,
User::LeaveIfError(iSocket.SetLocalPort(59846)); //Port where the streaming packets will be received
iSocket.SetOpt( KSoIp6MulticastLoop, KProtocolInetIp, 0);
iSocket.SetOpt(KSoIp6MulticastHops, KSoInetIp,4);
iSocket.SetOpt( KSoReuseAddr, KProtocolInetIp, 1 )<br>
TInetAddr multicastaddr;
multicastaddr.SetAddress(INET_ADDR(228,19,126,221)); //Multicast Group Address
multicastaddr.SetFamily(KAFInet);
multicastaddr.ConvertToV4Mapped();
TIp6Mreq mreq;
mreq.iAddr = multicastaddr.Ip6Address();
mreq.iInterface = 0;
```

TSS001362_-_Joining_and_leaving_a_multicast_stream

```
TPckgBuf< TIp6Mreq > opt( mreq );  
User::LeaveIfError(iSocket.SetOpt(KSoIp6JoinGroup, KSolInetIp, opt ));
```

Leaving a multicast stream:

```
TInetAddr multicastaddr;  
multicastaddr.SetAddress(INET_ADDR(228,19,126,221));  
multicastaddr.SetFamily(KAfInet);  
multicastaddr.ConvertToV4Mapped();  
TIp6Mreq mreq;  
mreq.iAddr = multicastaddr.Ip6Address();<br>  
mreq.iInterface = 0;  
TPckgBuf< TIp6Mreq > opt( mreq );  
User::LeaveIfError(iSocket.SetOpt(KSoIp6LeaveGroup, KSolInetIp, opt ));
```

Note: A multicast stream can be set up using the LiveCaster application available here: [LiveCaster](#)