

Generating Multiple Stubs

You can generate single or multiple stub subprograms (interface objects) in either online or batch mode by using the command `SYSRPC SGMASS`.

You generate stub subprograms from subprograms.

This section contains information on:

- Using the `SYSRPC SGMASS` Command
 - Name Specification and Compression
-

Using the `SYSRPC SGMASS` Command

You can enter the command `SYSRPC SGMASS` at any `NEXT` or `MORE` command prompt for generating stub subprograms online.

The section below contains information on:

- Syntax of `SYSRPC SGMASS`
- `SYSRPC SGMASS` Report

Syntax of `SYSRPC SGMASS`

The syntax that applies to `SYSRPC SGMASS` is illustrated in the diagram below:

```
SYSRPC SGMASS [name] [compression]
```

The syntactical items *name* and *compression* are explained in the section *Name Specification and Compression*.

`SYSRPC SGMASS` Report

The command `SYSRPC SGMASS` produces a report that lists the stub subprograms (objects) generated with the command as shown in the following example:

```

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      SYSRPC - Stub Generation in Library SAGTEST

Generation Criteria:

      Object name or range: RPC*
      Compression: 1

Generation Results:

      Number of objects found:          8
      Maximum send length:  200228
      Maximum receive length: 1024192

Object      Type      Send Length  Receive Length  Message
-----
RPCCALL1   N                209           202
RPCCALL2   N                219           240   Compression=2
RPCCALL3   N                204           193
MORE

```

The report is organized in three sections, which contain the following information:

- **Generation Criteria:**

The criteria based on which the stub subprogram(s) were generated: a single object name or a range of names (here: RPC*) and the compression (here: 1).

- **Generation Results:**

The number of objects selected for the stub generation.

The maximum buffer sizes all generated stub subprograms require for sending and receiving data from the client.

- **Object List:**

The name and type (here: N for type subprogram) of each generated stub subprogram. The buffer sizes each object requires for sending (**Send Length**) and receiving (**Receive Length**) data from the client. A possible comment on each stub generation in the **Message** column. In the example above, **Compression=2** indicates that object RPCCALL2 was not generated with Compression 1 as requested in the command. The object list is sorted in alphabetical order of object names.

If the MORE prompt appears, choose ENTER to scroll to the end of the report.

If the stub generation fails for single or multiple objects, the report shows the number of objects affected and appropriate error messages.

Name Specification and Compression

You can specify the objects (subprograms) to be selected for stub generation and the type of compression to be used:

- Name
- Compression

Name

You can specify an object name or a range of names. The specification of an object name or a range of names is optional.



Warning:

If you do not specify an object name or a range of names, with few exceptions (see below), all subprograms in the current library will be converted to stub subprograms.

Valid name specifications are described below where *value* is any combination of one or more alphanumeric characters:

Input	Objects Selected
*	All subprograms. This is the default setting.
<i>value</i>	A subprogram with a name equal to <i>value</i> .
<i>value</i> *	All subprograms with names that start with <i>value</i> .
<i>value</i>	All subprograms with names less than or equal to <i>value</i> .
<i>value</i>	All subprograms with names greater than or equal to <i>value</i> .

Exceptions to Names

In the Natural system library SYSRPC, SYSRPC SGMASS exempts from stub generation all subprograms with names that start with any of the following prefixes: RDS, RPC, NAT, NAD or NSC.

In user libraries, SYSRPC SGMASS exempts from stub generation the subprogram NATCLTGS.

Compression

You can specify any of the following compression types: 0, 1, 2. The specification of compression is optional. The default type used for stub generation is 1.

See also *Using Compression* described in *Operating a Natural RPC Environment* in the *Natural Remote Procedure Call (RPC)* documentation.