# Examples of Using Direct Commands

This section provides examples for using Object Handler direct commands.

- Unloading Objects for the Same Platform
- Unloading Objects for Different Platforms
- Loading Objects in Internal Format
- Loading Objects in Transfer Format
- Batch Processing in a Remote Environment

**Tip:**
For additional examples, you can view the command generated for an Object Handler function. This command is automatically displayed when you use a wizard. In advanced-user mode, you can activate the display of the command by either entering the Object Handler command `SET ADVANCEDCMD ON` or setting the parameter `Display-Cmd-in-Advanced-Mode` to `Y` (Yes) in the Object Handler profile (see also *Profile Settings*).

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## Unloading Objects for the Same Platform

This section contains examples of how to unload objects in internal format to a work file in order to load them on the same platform, within either a local mainframe, UNIX, OpenVMS or Windows environment:

- Unload all Natural programming objects (source objects only) from library ABC:

```
UNLOAD * LIB ABC OBJTYPE N SCKIND S
```

- Unload all Natural programming objects (cataloged objects only) from library ABC:

```
UNLOAD * LIB ABC OBJTYPE N SCKIND C
```

- Unload all Natural programming objects (cataloged objects and source objects) from library ABC:

```
UNLOAD * LIB ABC OBJTYPE N SCKIND A
```

- Unload all Natural programming objects (source objects only) from library ABC to load in library ABCNEW:

```
UNLOAD * LIB ABC OBJTYPE N SCKIND S WITH NEWLIBRARY ABCNEW
```

- On a mainframe: Unload all DDMs whose names start with EMP and which point to database 88:

```
UNLOAD EMP* LIB * OBJTYPE D DDMDBID 88
```

- On UNIX, OpenVMS or Windows: Unload all DDMs whose names start with EMP and which point to database 88:

```
UNLOAD EMP* LIB * OBJTYPE N NATTYPE V DDMDBID 88
```

- On UNIX, OpenVMS or Windows: Unload all DDMs whose names start with EMP from library VLIB to load in library VLIBNEW:

```
UNLOAD EMP* LIB VLIB OBJTYPE N NATTYPE V WITH NEWLIBRARY VLIBNEW
```

- Unload all user-defined error messages from library ERRLIB to load in library NEWERR:

```
UNLOAD * LIB ERRLIB OBJTYPE E SLKIND A WITH NEWLIBRARY NEWERR
```

- On Windows: Unload all Natural programming objects (cataloged objects and source objects) from library ABC to a portable work file on a PC:

```
UNLOAD * LIB ABC OBJTYPE N WHERE WORKFILE C:\WF1.SAG WORKFILETYPE PORTABLE
```

or

```
UNLOAD * LIB ABC OBJTYPE N WHERE WORK C:\WF1.SAG WFT P
```

# Unloading Objects for Different Platforms

This section contains command examples of how to unload objects in Transfer format to a work file in order to load them on a different platform such as unloading in a mainframe and loading in a UNIX, an OpenVMS or a Windows environment.

- Unload all Natural programming objects (source objects only) from library ABC:

```
UNLOAD * LIB ABC OBJTYPE N WHERE TRANSFER
```

- Unload all Natural programming objects (source objects only) and user-defined error messages from library ABC:

```
UNLOAD * LIB ABC WHERE TRANSFER
```

- Unload all Natural programming objects (source objects only) from library ABC with fixed record length:

```
UNLOAD * LIB ABC OBJTYPE N WHERE TRANSFER FIXEDLENGTH
```

# Loading Objects in Internal Format

This section contains command examples of how to load objects from a work file in internal format.

- Load all objects to library LIBNEW and replace any that already exist:

```
LOADALL WITH NEWL LIBNEW WHERE REPLACE ALL
```

- Load all object with target library TGTLIB to the new target library NEWTGT:

```
LOAD * LIB TGTLIB WITH NEWLIBRARY NEWTGT
```

- Load the user-defined error messages 1000 to 1500 from library ERRLIB only:

```
LOAD * LIB ERRLIB OBJTYPE E FMNUM 1000 TONUM 1500
```

# Loading Objects in Transfer Format

This section contains command examples of how to load objects from a work file in Transfer format.

- Load all objects to library LIBNEW and replace any that already exist:

```
LOADALL WITH NEWL LIBNEW WHERE TRANSFER REPLACE ALL
```

- Load all object with target library TGTLIB to new target library NEWTGT:

```
LOAD * LIB TGTLIB WITH NEWLIBRARY NEWTGT WHERE TRANSFER
```

# Batch Processing in a Remote Environment

You can use direct commands to unload objects in batch mode from a remote Natural Development Server (NDV) environment or load objects in batch into a remote NDV environment.

The examples in this section illustrate the use of direct commands in batch to transfer objects from one remote NDV environment to another.

- Input Commands in CMSYNIN File
- Input Data in CMOBJIN File
- Explanation of File Contents

## Input Commands in CMSYNIN File

```
MAP ENVIRONMENT=UX1 SUNNAT63 6312 SAG
SYSOBJH
UNMAP
MAP ENVIRONMENT=MF1 IBM2 4742 SAG
SYSOBJH
UNMAP
FIN
```

## Input Data in CMOBJIN File

```
UNLOAD * LIB SAG-TEMP %
WHERE TRANS WFLOC PC WORK D:\NAT-Work\w1.dat REPORT
SHOW STATISTICS
END
LOADALL WHERE TRANS WFLOC PC WORK D:\NAT-Work\w1.dat %
REPLACE ALL REPORT
SHOW STATISTICS
END
```

## Explanation of File Contents

| | |
|---|---|
| `MAP ENVIRONMENT=UX1 SUNNAT63 6312 SAG` | Maps to an NDV environment on a UNIX or an OpenVMS platform. |
| `SYSOBJH` | Invokes the Object Handler (on the Windows client) that receives the following three commands from the input data in the CMOBJIN file:<br><br>`UNLOAD * LIB SAG-TEMP %`<br>`WHERE TRANS WFLOC PC WORK D:\NAT-Work\w1.dat`<br>`REPORT`<br><br>Causes the Object Handler to unload all objects from library SAG-TEMP in the remote UNIX or OpenVMS environment into the work file contained in the local Windows directory *D:\NAT-Work\w1.dat*.<br><br>`SHOW STATISTICS`<br><br>Writes statistical data about the unloaded objects to the CMPRINT output file.<br><br>`END`<br><br>Terminates the Object Handler. |
| `UNMAP` | Unmaps the NDV environment on the UNIX or OpenVMS platform. |
| `MAP ENVIRONMENT=MF1 IBM2 4742 SAG` | Maps to an NDV environment on a mainframe platform. |
| `SYSOBJH` | Invokes the Object Handler (on the Windows client) that receives the following three commands from the input data in the CMOBJIN file:<br><br>`LOADALL WHERE TRANS WFLOC PC %`<br>`WORK D:\NAT-Work\w1.dat REPLACE ALL REPORT`<br><br>Causes the Object Handler to load all objects from the work file in the local Windows directory *D:\NAT-Work\w1.dat* into the remote mainframe environment.<br><br>`SHOW STATISTICS`<br><br>Writes statistical data about the loaded objects to the CMPRINT output file.<br><br>`END`<br><br>Terminates the Object Handler. |
| `UNMAP` | Unmaps the NDV environment on the mainframe platform. |
| `FIN` | Terminates the Natural batch session. |