

# General Overview

This section covers the following topics:

- Symbol Tables
- Symbol Table Search Hierarchy
- Reserved Symbol Table Names
- Global Symbols
- Predefined Symbols
- Symbol Replacement
- Master Symbol Table
- Active Symbol Table

## Symbol Tables

Symbol tables are used for parameter substitution in Dynamic JCL Generation.

Symbol tables consist of a list of variables and their current values that are read into the dynamically generated JCL of MAC-type and JOB-type jobs at job activation time. The symbol table referenced must be specified for the job at definition time or in the active queue for a single job run.

Symbol tables are associated with owners. Each owner can have several symbol tables. You can only maintain the symbol tables that belong to your owner.

Symbols can be defined manually within Entire Operations, or they can be generated by any program, which invokes a subprogram delivered with Entire Operations, to set, reset, or modify a symbol. The symbol table entries contain the format, prompting type, prompting text (optional), and the value of a symbol.

## Symbol Table Search Hierarchy

Symbols are searched for in the following order:

Order	Symbol Table	Description
1	Active symbol table of job.	
2	Master symbol table of job.	
3	Active symbol table of the network.	
4	Master symbol table of the network.	
5	Active symbol table of the caller job.	Only if the active job is within a sub-network.
6	Active symbol table of the caller network.	Only if the active job is within a sub-network.
7	Master symbol table <owner> / A.	<owner> is the current owner of the active job. The symbol table <owner> / A is searched even if there is no symbol table definition on the job level and / or network level.
8	Master symbol table SYSDBA / A.	The symbol table SYSDBA / A is searched even if there is no symbol table definition on the job level and / or network level.

If a symbol cannot be found anywhere, either the Symbol Not Found global exit is called (if defined), which determines the further processing, or the job is set to error status.

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## Reserved Symbol Table Names

The symbol table name with prefix =EOR= is reserved as Entire Operations-internal and the check for it is implemented starting with version 4.1.1. For the future, we advise to avoid this prefix in any EOR object being created even if not rejected now.

## Global Symbols

Global symbols are symbols defined for use spanning all jobs and networks. They are kept centrally in symbol table A of owner SYSDBA.

## Predefined Symbols

There are a number of predefined symbols. You can find a description of these in the section Predefined Symbols.

## Symbol Replacement

How symbols are replaced is described in the subsection Symbol Tables.

### Notes:

- Starting with Entire Operations 4.1.1, a symbol replacement is always attempted, if one of the defined escape characters is found in a line. It is no longer necessary for a symbol table to be defined on the job or network level. Symbols can also be replaced via global symbol tables. Predefined symbols can be replaced without having to define a symbol table.
- If an escape character is detected and no symbol table is defined, the error message `‡no symbol table defined` will be issued.

## Master Symbol Table

There are **two** ways to display a **master** symbol table:

### Method 1

1. Select the Symbol Tables option from the Main Menu.
2. The Master Symbol Tables window opens.
3. Type **L** in the line command input field of the appropriate symbol table.
4. Press Enter.
5. The selected **master** symbol table appears.

## Method 2

1. From the Master Job Definition window, press PF7 (Symb).
2. The **master** symbol table for the job appears.

## Active Symbol Table

During job or job network activation, an **active copy** of each symbol table used is created. To display an **active** symbol table:

1. Press PF7 (Symb) from the Active Job Definition window.
2. The **active** symbol table for the job appears.

To identify an active symbol table uniquely, both the network name and run number are required.

Active symbols are maintained analogously to master symbols. Therefore, only the maintenance of master symbol tables and symbols is described in the following paragraphs.

Please note that all modifications of active symbols apply **to the current run only**.