

Maps

As an alternative to dynamic screen layout specification, the INPUT statement offers the possibility to use predefined map layouts which makes use of the Natural object type "map".

The following topics are covered:

- Benefits of Using Maps
 - Types of Maps
 - Creating Maps
 - Starting/Stopping Map Processing
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Benefits of Using Maps

Using predefined map layouts rather than dynamic screen layout specifications offers various advantages such as:

- Clearly structured applications as a result of a consequent separation of program logic and display logic.
- Map layout modifications possible without making changes to the body programs.
- The language of an applications's user interface can be easily adapted for internationalization or localization.

At least, when it comes to maintaining existing Natural applications, the profit of using programming objects such as maps will become obvious.

Types of Maps

Maps (screen layouts) are those parts of an application which the users see on their screens.

The following types of maps exist:

- **Input Map**
The dialog with the user is done via input maps.
- **Output Map**
If an application produces any output report, this report can be displayed on the screen by using an output map.
- **Help Map**
Help maps are, in principle, like any other maps, but when they are assigned as help, additional checks are performed to ensure their usability for help purpose.

The object type "map" comprises

- the map body which defines the screen layout and
- an associated parameter data area (PDA) which, as a sort of interface, contains data definitions such as name, format, length of each field presented on a specific map.

Related Topics:

- For information on selection boxes that can be attached to input fields, see SB - Selection Box in the INPUT statement documentation and SB - Selection Box in the Natural Parameter Reference documentation.
- For information on split screen maps where the upper portion may be used as an output map and the lower portion as an input map, see Split-Screen Feature in the INPUT statement documentation.

Creating Maps

Maps and help map layouts are created and edited in the map editor. The appropriate LDA is created and maintained in the data area editor.

Depending on the platform on which Natural is installed, these editors have either a character user interface or a graphical user interface.

Related Topics:

- For information on using the map editor, see Map Editor in the platform-specific Natural Editor documentation.
- For information on using the map editor, see Data Area Editor in the platform-specific Natural Editor documentation.
- For a comprehensive description of the full range of possibilities provided by the Natural map editor (character-user-interface version), see Tutorial - Using the Map Editor.
- For information on , see Syntax 1 - Dynamic Screen Layout Specification in the INPUT statement documentation.
- For information on input processing using a map layout created with the map editor, see Syntax 2 - Using Predefined Map Layout in the INPUT statement documentation.

Starting/Stopping Map Processing

An **input map** is invoked with an INPUT USING MAP statement.

An **output map** is invoked with a WRITE USING MAP statement.

Processing of a map can be stopped with an ESCAPE ROUTINE statement in a processing rule.