NAME

clustertoc – cluster table of contents description file

DESCRIPTION

The cluster table of contents file, **.clustertoc,** is an ASCII file that describes a hierarchical view of a software product. A **.clustertoc** file is required for the base OS product. The file resides in the top-level directory containing the product.

The hierarchy described by **.clustertoc** can be of arbitrary depth, although the initial system installation programs assume that it has three levels. The hierarchy is described bottom-up, with the packages described in **.packagetoc** at the lowest layer. The next layer is the *cluster* layer which collects packages into functional units. The highest layer is the *meta-cluster* layer which collects packages and clusters together into typical configurations.

The hierarchy exists to facilitate the selection or deselection of software for installation at varying levels of granularity. Interacting at the package level gives the finest level of control over what software is to be installed.

Each entry in the **.clustertoc** file is a line that establishes the value of a parameter in the following form:

*PARAM***=***value*

A line starting with a pound-sign, ''#'', is considered a comment and is ignored.

Parameters are grouped by cluster or meta-cluster. The start of a cluster description is defined by a line of the form:

*CLUSTER***=***value*

The start of a meta-cluster description is defined by a line of the form:

*METACLUSTER***=***value*

There is no order implied or assumed for specifying the parameters for a (meta-)cluster with the exception of the *CLUSTER* or *METACLUSTER* parameter, which must appear first and the *END* parameter which must appear last.

Each parameter is described below. All of the parameters are mandatory.

CLUSTER The cluster identifier (for example, SUNWCacc). The identifier specified must be unique within the package and cluster identifier namespace defined by a product's **.packagetoc** and **.clustertoc** files. The identifiers used are subject to the same constraints as those for package identifiers. These constraints are (from **pkginfo**(4)):

''All characters in the abbreviation must be alphanumeric and the first may not be numeric. The abbreviation is limited to a maximum length of nine characters. **install**, **new**, and **all** are reserved abbreviations.''

A cluster must be described before another cluster or meta-cluster may refer to it.

METACLUSTER The metacluster identifier (for example, *SUNWCprog*). The identifier specified must be unique within the package and cluster identifier namespace defined by a product's **.packagetoc** and **.clustertoc** files. The identifiers used are subject to the same constraints as those for package identifiers. These constraints are (from **pkginfo**(4)):

''All characters in the abbreviation must be alphanumeric and the first may not be numeric. The abbreviation is limited to a maximum length of nine characters. **install**, **new**, and **all** are reserved abbreviations.''

Meta-clusters *cannot* contain references to other meta-clusters.

NAME The full name of the (meta-)cluster. The length of the name string supplied may not exceed 256 characters.

VENDOR The name of the (meta-)cluster's vendor. The length of the vendor string supplied may not exceed 256 characters.

VERSION The version of the (meta-)cluster. The length of the version string supplied may not exceed 256 characters.

DESC An informative textual description of the (meta-)cluster's contents. The length of the description supplied may not exceed 256 characters. The text should contain no newlines.

SUNW_CSRMEMBER
Indicates that the package or cluster is a part of the (meta-) cluster currently being described. The value specified is the identifier of the package or cluster. There may be an arbitrary number of *SUNW_CSRMEMBER* parameters per (meta-)cluster.

SUNW_CSRMBRIFF
Indicates that the package is to be included dynamically in the (meta-)cluster currently being described. The value of this parameter must follow the following format:

SUNW_CSRIFFMBR=(<*test*> <*test_arc*>)<*package*>

This line will be converted into a *SUNW_CSRMEMBER* entry at media installation time if the test provided matches the platform on which the media is being installed. There may be zero or more *SUN_CSRIFFMBR* parameters per (meta-)cluster.

SUNW_CSRMBRIFF=(<test> <value>)<package>
where the the <test> is either the builtin test of "platform" or a shell script which returns shell true (0) or shell false (1) depending on the tests being performed in the script. <value> is passed to the test as the first argument and can be used to create a script that tests for multiple hardware objects. Finally <package> is the package that will be included in the final **.clustertoc** file as a *SUNW_CSRMEMBER*. See **parse_dynamic_clustertoc**(1M) for more information about the scripts.

EXAMPLES

The following is an example of a cluster description in a **.clustertoc** file.

```
CLUSTER=SUNWCacc
NAME=System Accounting
DESC=System accounting utilities
VENDOR=Sun Microsystems, Inc.
VERSION=7.2
SUNW_CSRMEMBER=SUNWaccr
SUNW_CSRMEMBER=SUNWaccu
END
```

The following is an example of a meta-cluster description in a **.clustertoc** file.

```
METACLUSTER=SUNWCreq
NAME=Core System Support
DESC=A pre-defined software configuration consisting of the minimum
required software for a standalone, non-networked workstation.
VENDOR=Sun Microsystems, Inc.
VERSION=2.x
SUNW_CSRMEMBER=SUNWadmr
SUNW_CSRMEMBER=SUNWcar
SUNW_CSRMEMBER=SUNWCcs
SUNW_CSRMEMBER=SUNWCcg6
SUNW_CSRMEMBER=SUNWCdfb
SUNW_CSRMEMBER=SUNWkvm
SUNW_CSRMEMBER=SUNWCnis
SUNW_CSRMEMBER=SUNWowdv
SUNW_CSRMEMBER=SUNWter
END
```

SEE ALSO

parse_dynamic_clustertoc(1M), **cdtoc**(4), **order**(4), **packagetoc**(4), **pkginfo**(4)

NOTES

The current implementation of the initial system installation programs depend on the **.clustertoc** describing three required meta-clusters for the base OS product:

SUNWCall contains all of the software packages in the OS distribution.

SUNWCuser contains the typical software packages for an end-user of the OS distribution.

SUNWCreq contains the bare-minimum packages required to boot and configure the OS to the point of running a multi-user shell.