Data Backup and Restore Component – Design

Radim Gelner <*radim.gelner@suse.cz*>
Lukáš Ocilka <*lukas.ocilka@suse.cz*>

Copyright © 2003, 2004, SuSE CR, s.r.o.

Revhistory:
1.0, 28.6.2003
1.1, 29.7.2003
1.2, 20.2.2004
1.3, 27.2.2004

Abstract

The Design Specification involves planning and documenting the global features of the SuSE Backup and Restore Component in preparation for the Development phase. This document should provide the programmers with the necessary information to design and write software routines to perform well-defined tasks within the application. The low level internal features (such as flow of control, variable types, error handling, etc.) are left for the Development phase.

1 Description

The component consists of these high level subcomponents:

- YaST Data Backup and Restore module,
- 3rd party subcomponents:
  - star, program to create the archive,
  - openssl, program to encrypt the archive,
  - cron, program to run unattended backups.

YaST subcomponent handles configuration and control of backup and restore using 3rd party subcomponents.

2 Default scenario

The administrator starts YaST Data Backup and Restore module to configure backup or restore.

Once the configuration is complete, the administrator performs backup or restore.

3 Interface

The interprocess communication between YaST module and 3rd party subcomponents is handled SCR interface of the YaST framework.

4 Subcomponents

4.1 YaST Data Backup and Restore module

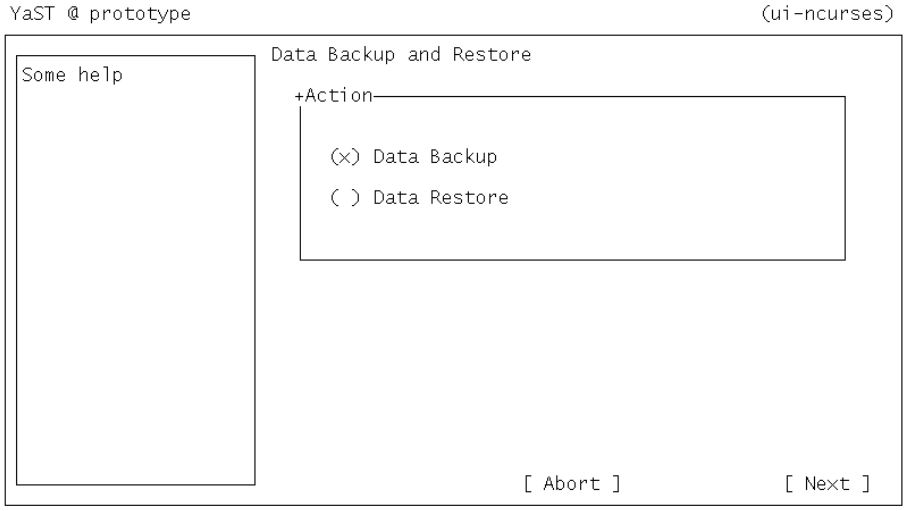
4.1.1 Description

The YaST module is the "frontend" to the 3rd party programs configuration and control.

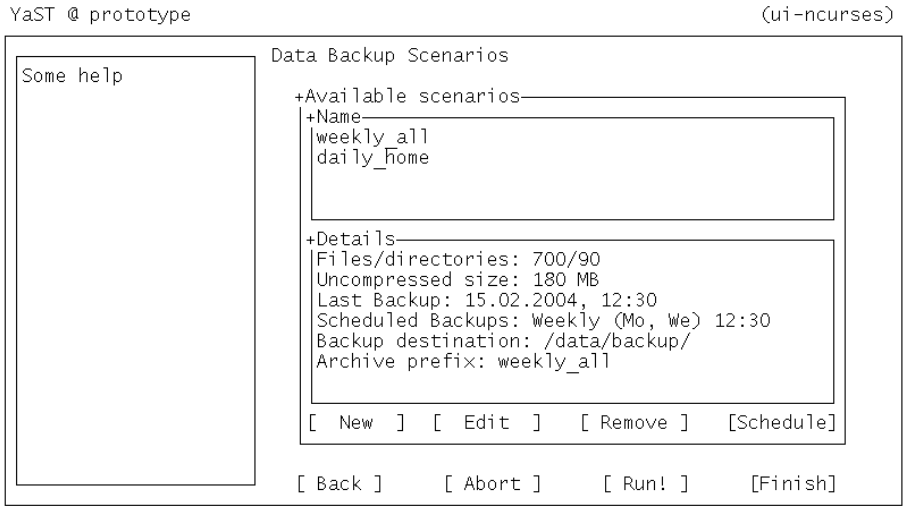
It allows setup of the scenario, i.e. creation of the filelist and properties of the backup and restore.

4.1.2 Default Scenario

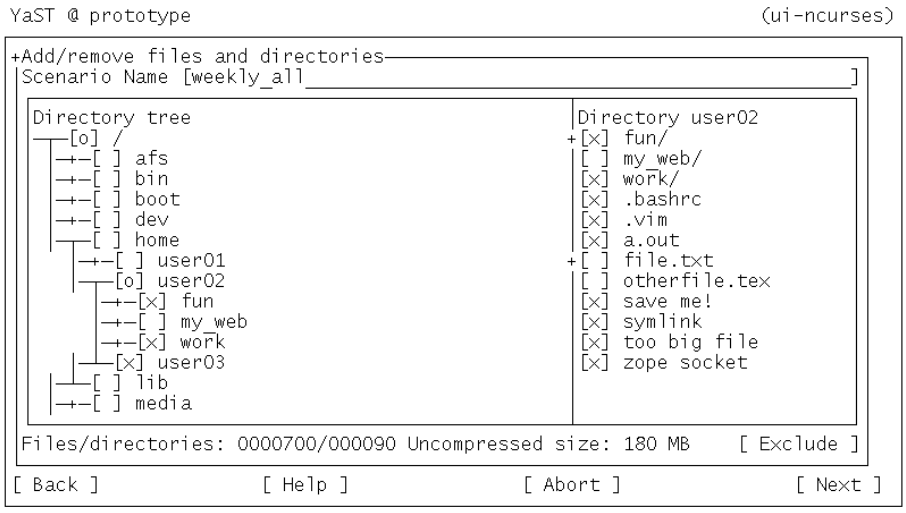
The first step for the administrator is to choose either backup or restore service of the component.



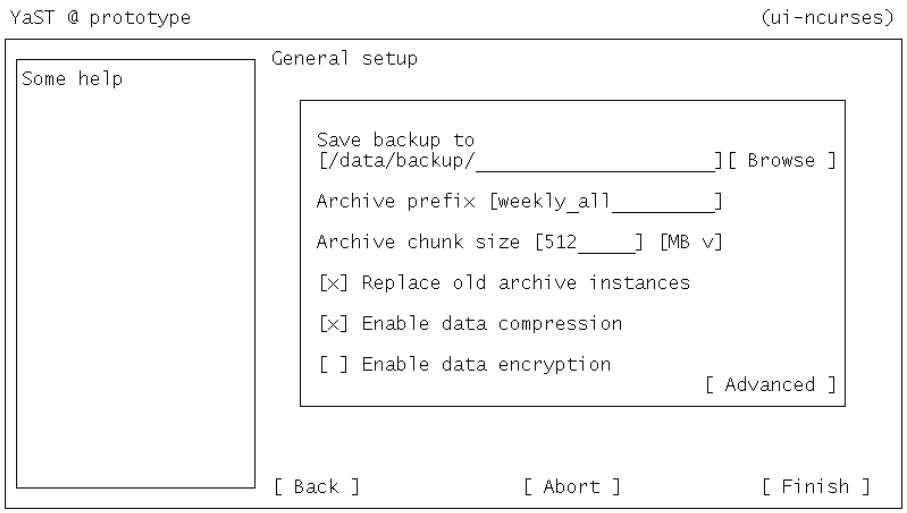
4.1.2.1 Backup In case of backup the list of already available backup scenarios is shown allowing the administrator to add new scenario, edit or remove the existing scenarios and finally run them or schedule them to run unattended.



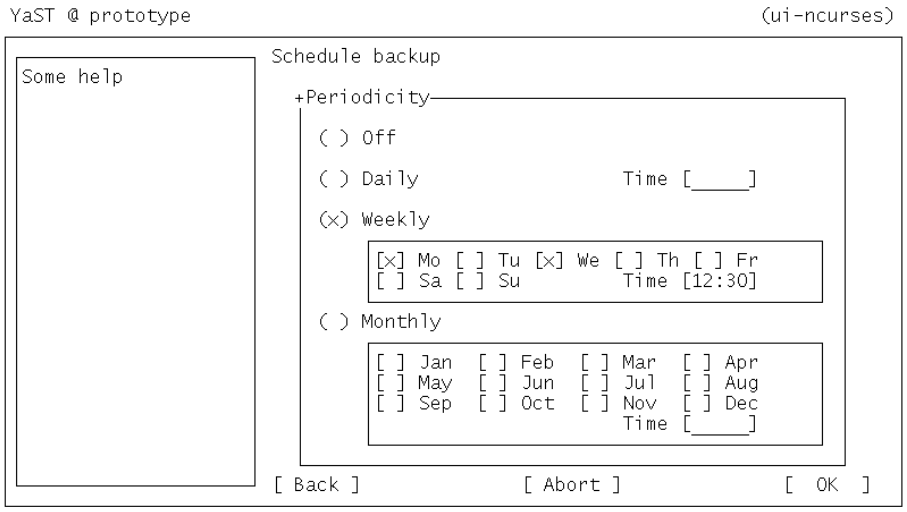
Adding the scenario starts with the name definition, continues with selection of directories and files to backup...



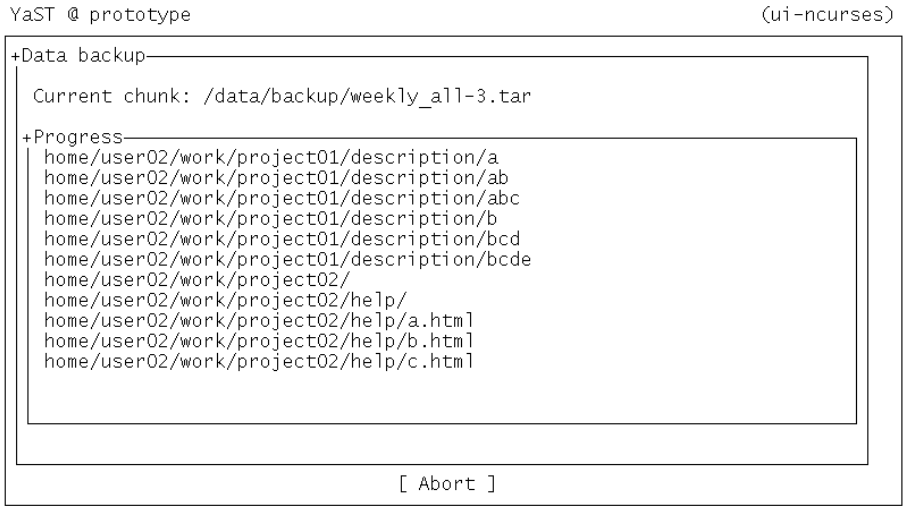
...and finishes with the backup properties configuration.



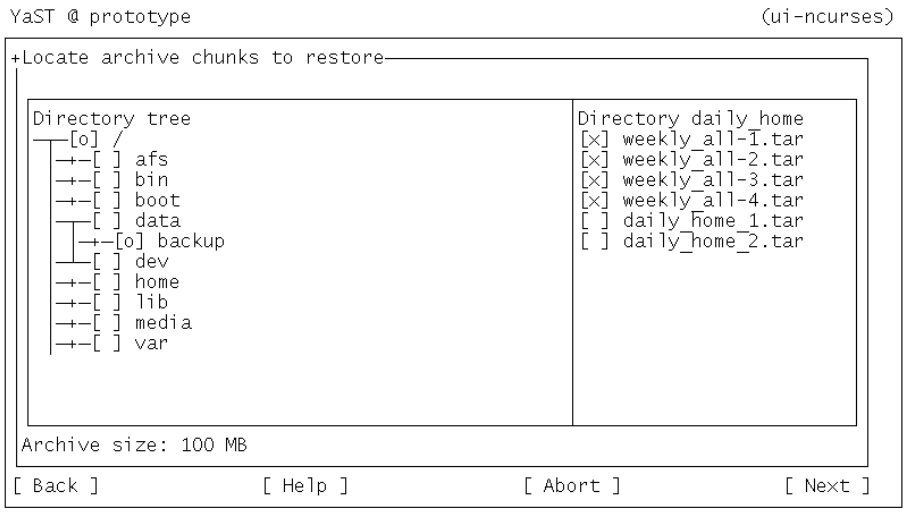
Then the administrator returns to the start of the backup process. There the backup can be scheduled...



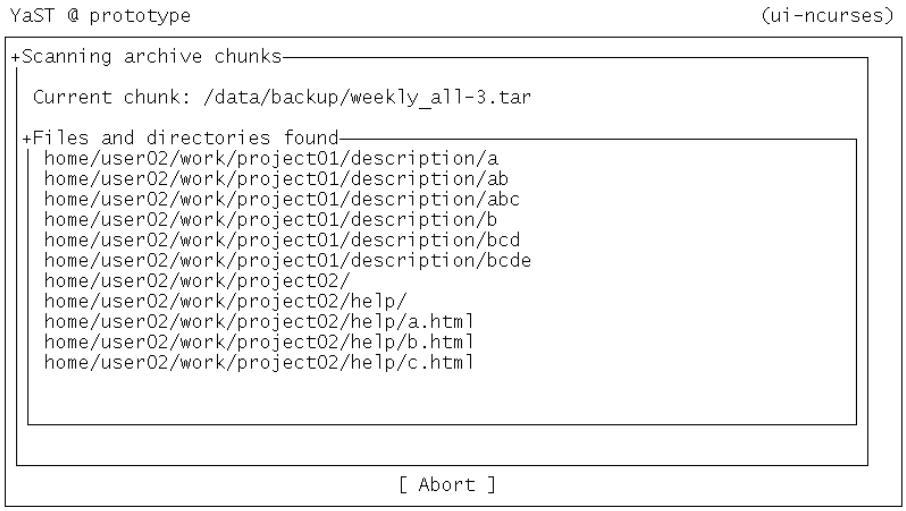
...or run directly.



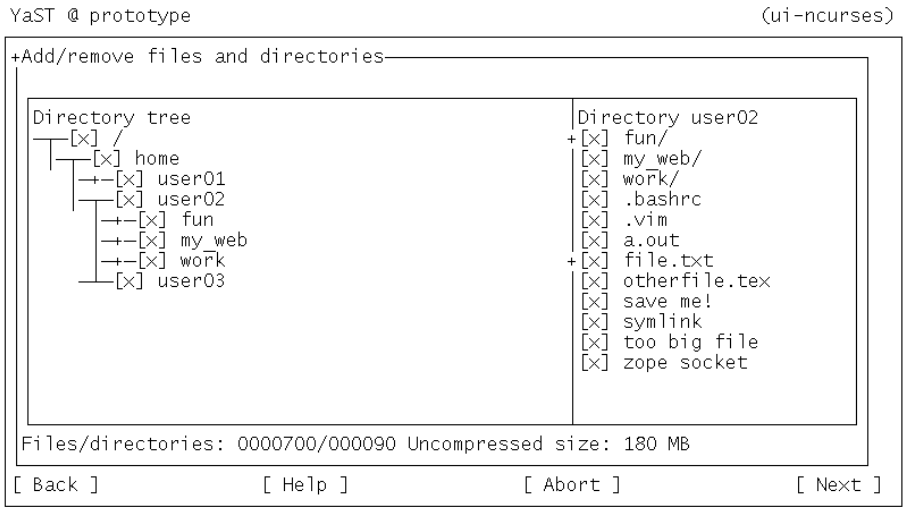
4.1.2.2 Restore In case of restore the administrator starts by locating the archive.



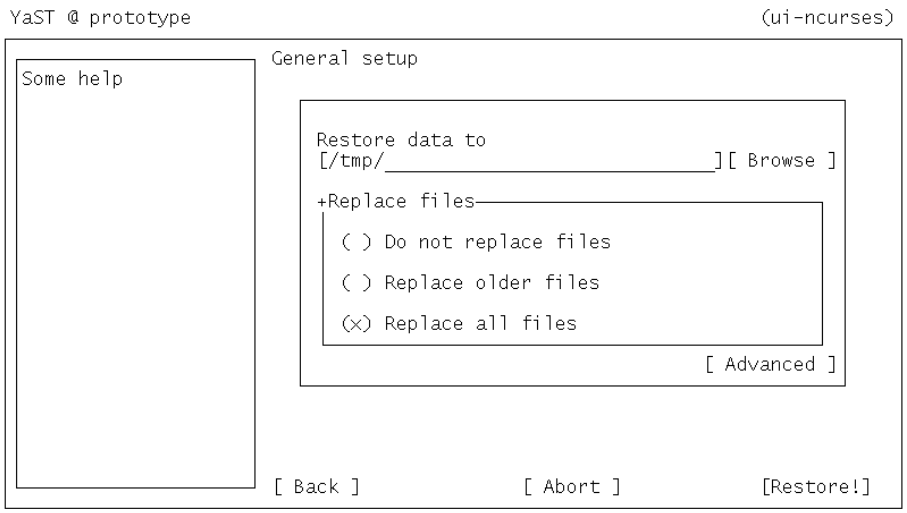
Then the list of directories and files is read from the selected archive chunks.



The administrator is presented with the directories and files in a tree view to choose which of them to restore...



...and finishes with the restore properties configuration.

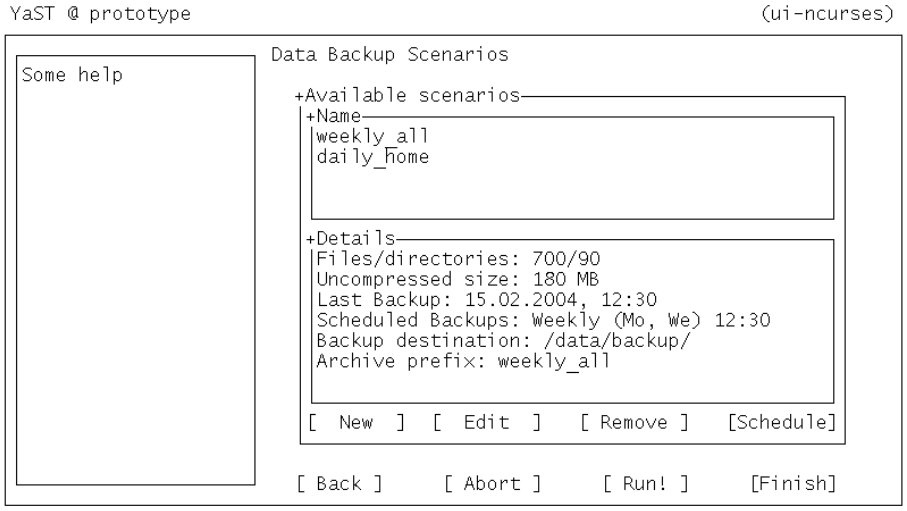


Then the restore is started.

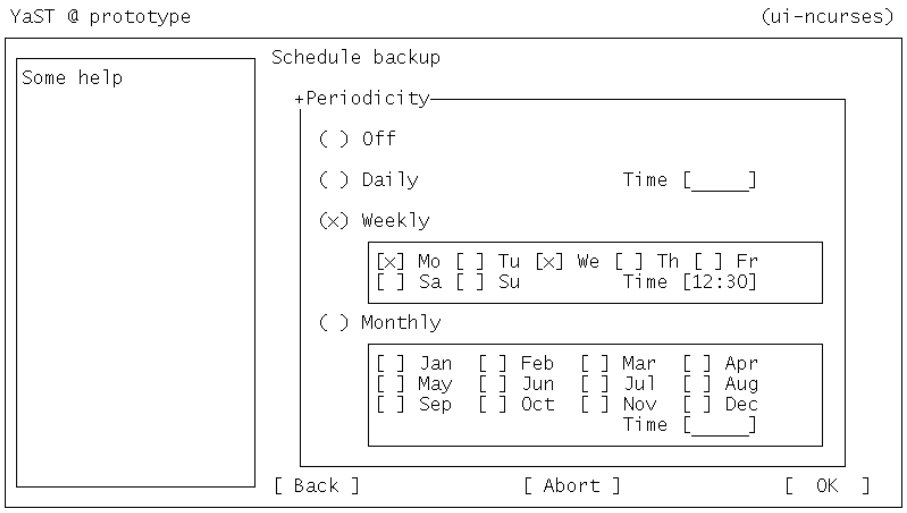
4.1.3 Interface

4.1.3.1 User interface of backup Follows the complete list of user interface dialogs for backup:

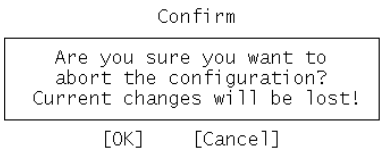
4.1.3.1.1 yastui_b02.txt



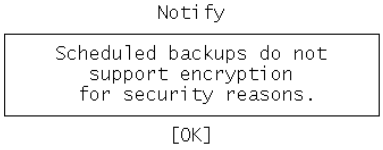
4.1.3.1.2 yastui_b02_01.txt



4.1.3.1.3 yastui_b02_01_01.txt

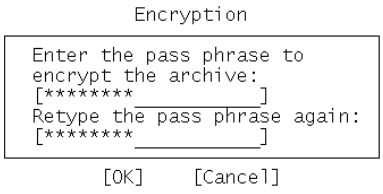


4.1.3.1.4 yastui_b02_01_02.txt

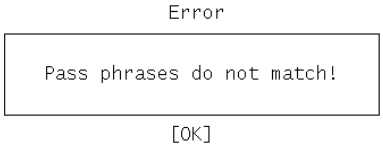


4.1.3.1.5 yastui_b02_02.txt

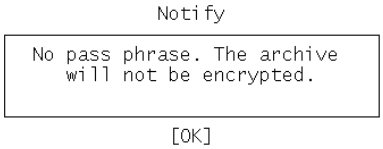
4.1.3.1.6 yastui_b02_02_01.txt



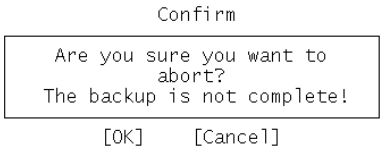
4.1.3.1.7 yastui_b02_02_01_01.txt



4.1.3.1.8 yastui_b02_02_01_02.txt



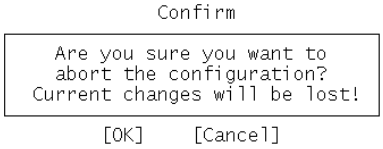
4.1.3.1.9 yastui_b02_02_02.txt



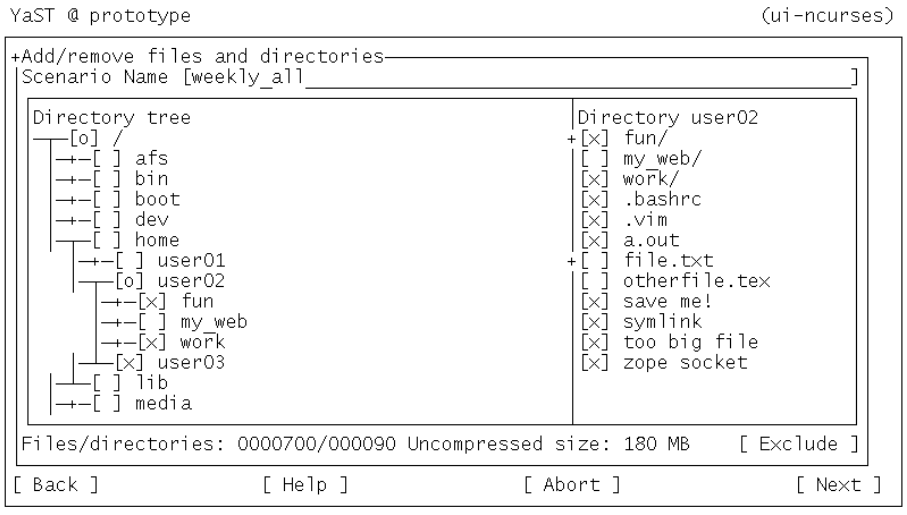
4.1.3.1.10 yastui_b02_02_03.txt

4.1.3.1.11 yastui_b02_02_04.txt

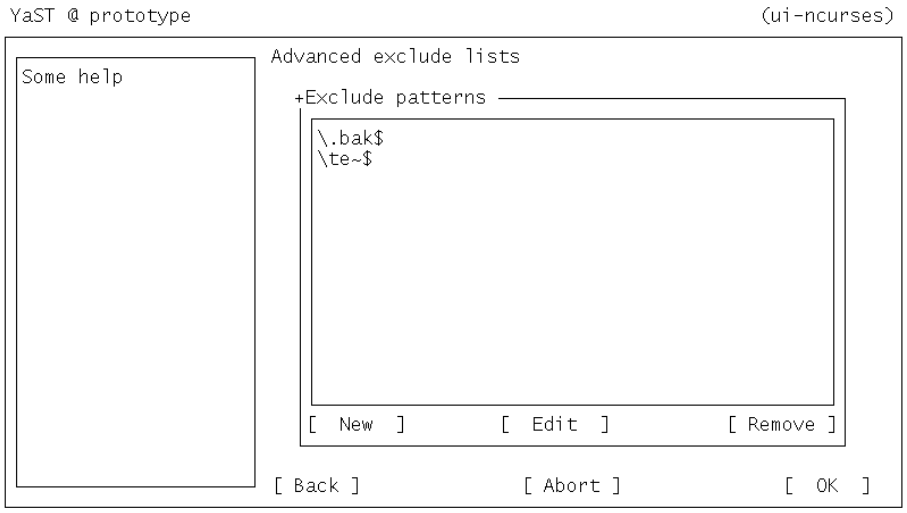
4.1.3.1.12 yastui_b02_03.txt



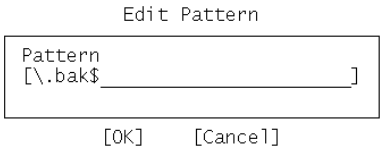
4.1.3.1.13 yastui_b03.txt



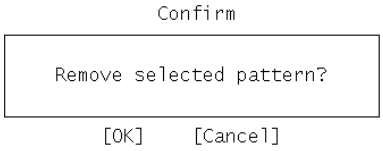
4.1.3.1.14 yastui_b03_01.txt



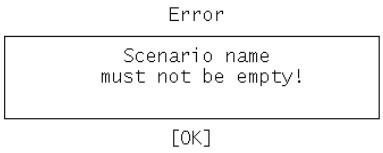
4.1.3.1.15 yastui_b03_01_01.txt



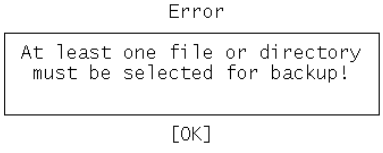
4.1.3.1.16 yastui_b03_01_02.txt



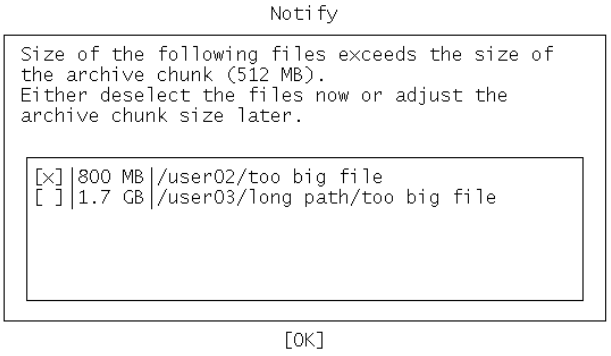
4.1.3.1.17 yastui_b03_02.txt



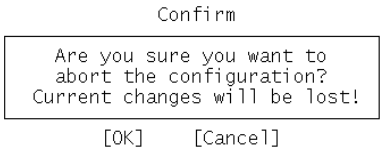
4.1.3.1.18 yastui_b03_03.txt



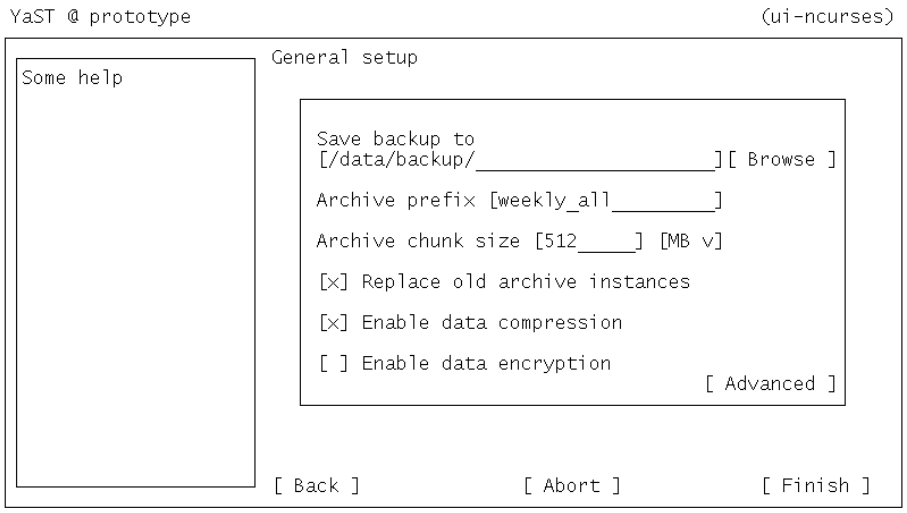
4.1.3.1.19 yastui_b03_04.txt



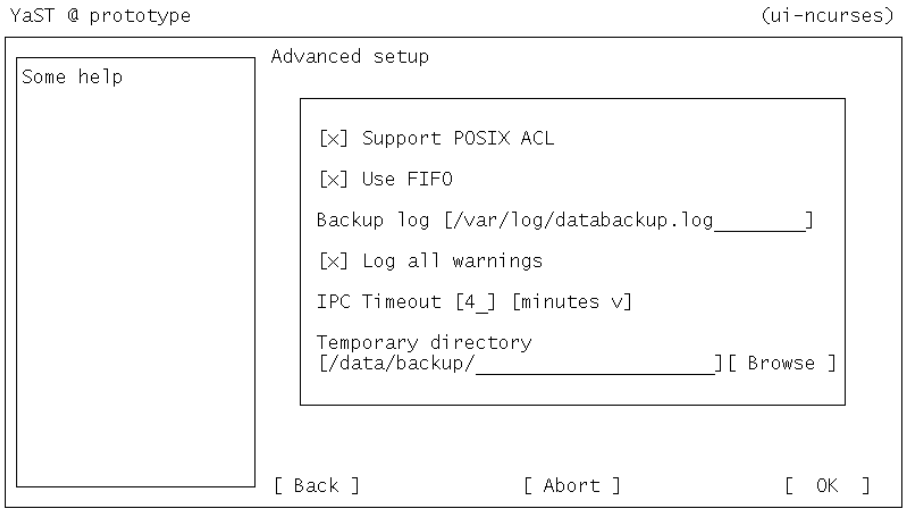
4.1.3.1.20 yastui_b03_05.txt



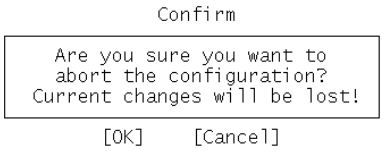
4.1.3.1.21 yastui_b04.txt



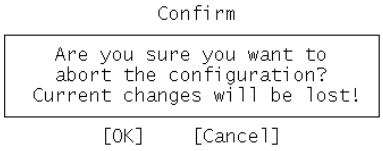
4.1.3.1.22 yastui_b04_01.txt



4.1.3.1.23 yastui_b04_01_01.txt



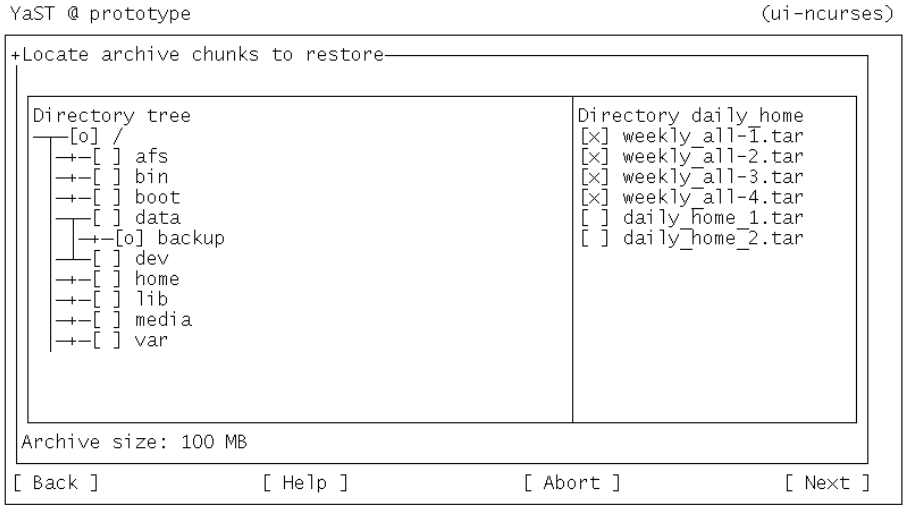
4.1.3.1.24 yastui_b04_02.txt



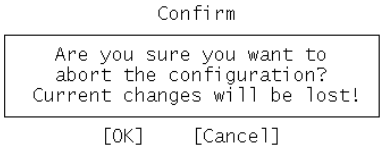
4.1.3.2 User interface of restore

Follows the complete list of user interface dialogs for restore:

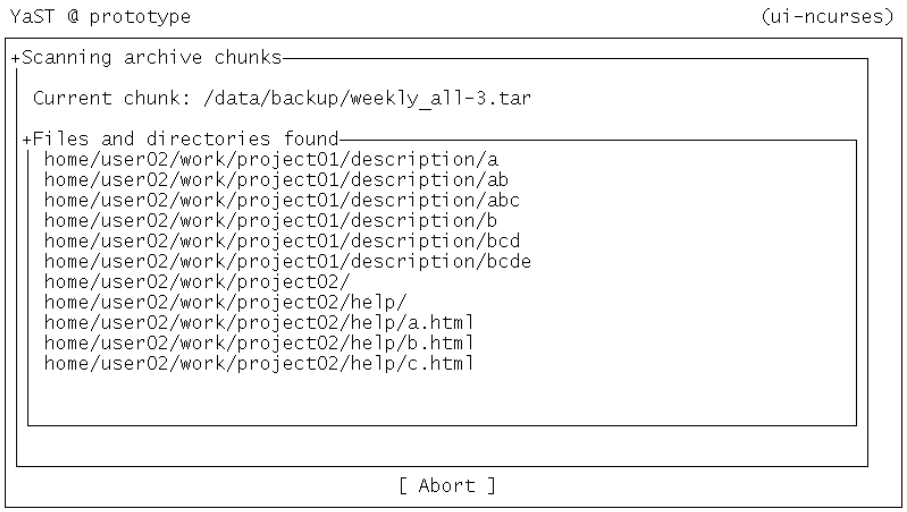
4.1.3.2.1 yastui_r02.txt



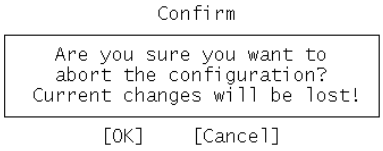
4.1.3.2.2 yastui_r02_01.txt



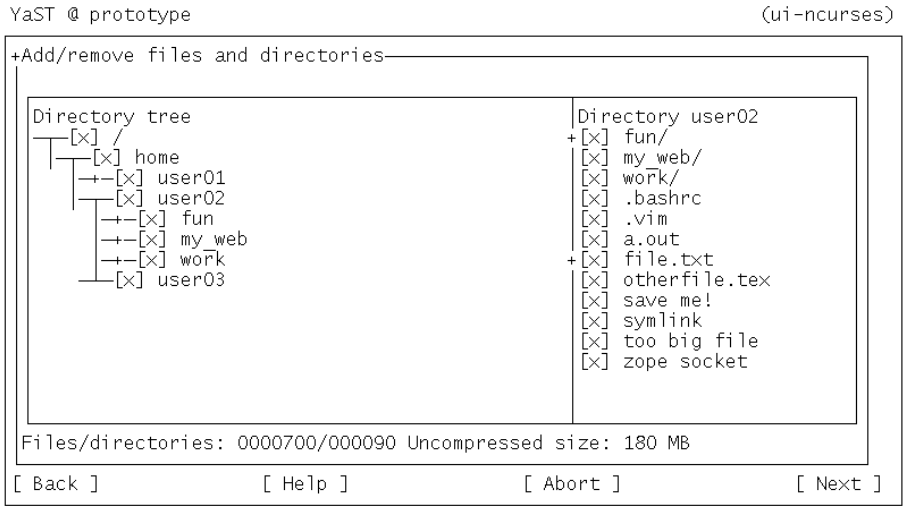
4.1.3.2.3 yastui_r03.txt



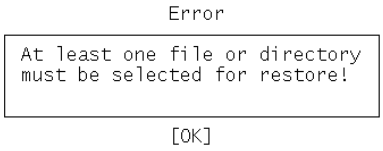
4.1.3.2.4 yastui_r03_01.txt



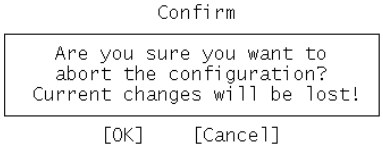
4.1.3.2.5 yastui_r04.txt



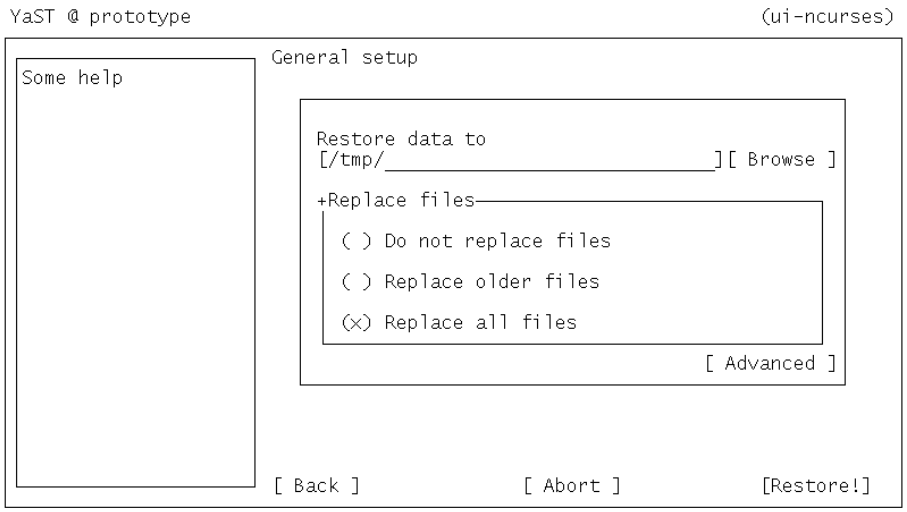
4.1.3.2.6 yastui_r04_01.txt



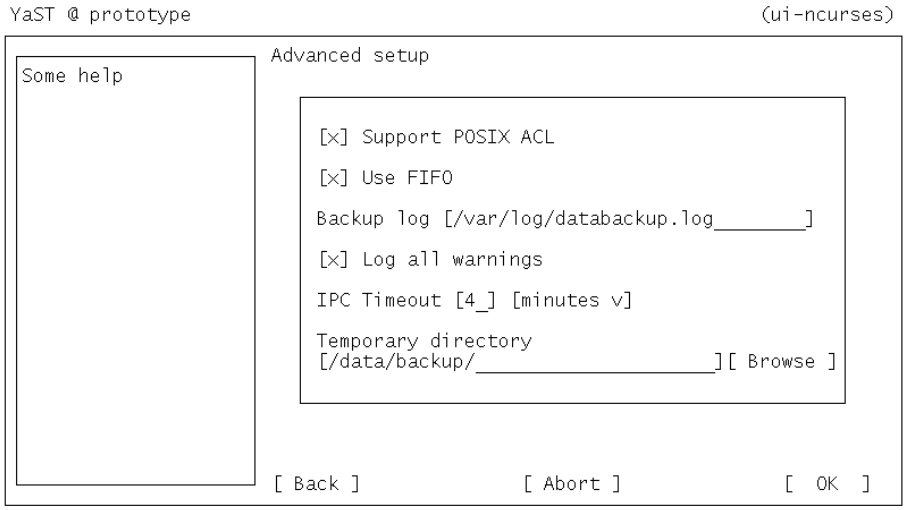
4.1.3.2.7 yastui_r04_02.txt



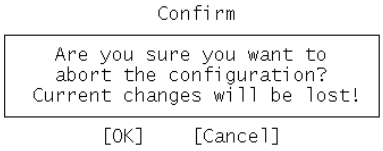
4.1.3.2.8 yastui_r05.txt



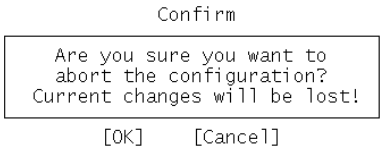
4.1.3.2.9 yastui_r05_01.txt



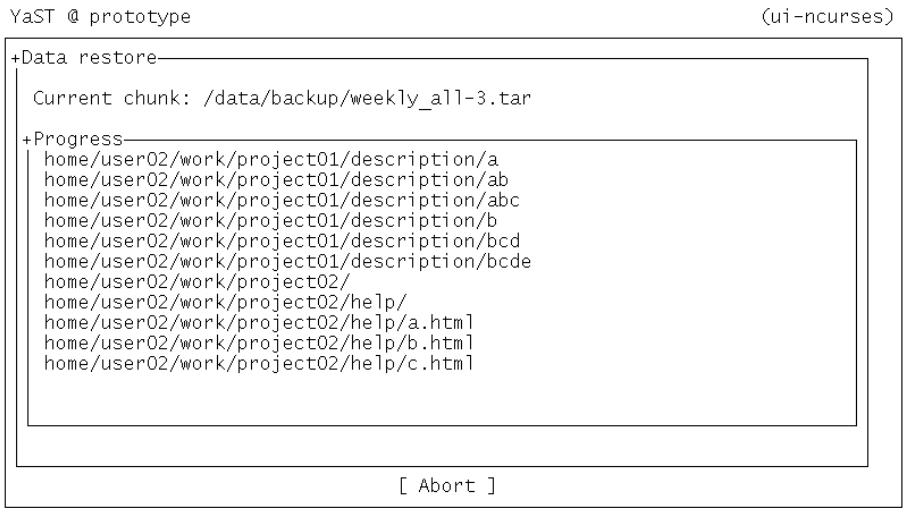
4.1.3.2.10 yastui_r05_01_01.txt



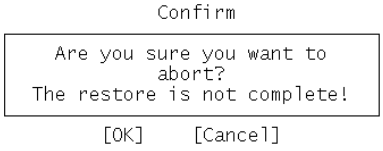
4.1.3.2.11 yastui_r05_02.txt



4.1.3.2.12 yastui_r06.txt



4.1.3.2.13 yastui_r06_01.txt



4.1.3.2.14 yastui_r06_02.txt

4.1.3.2.15 yastui_r06_03.txt

4.2 Star

4.2.1 Description

Star (Unique Standard Tape Archiver) is an archiving program with POSIX.1-2001 implementation. Supports POSIX ACL, multiple archives, archive – filelist, pattern matching, diff for archives and more.

4.2.2 Default Scenario

...

4.2.3 Interface

...