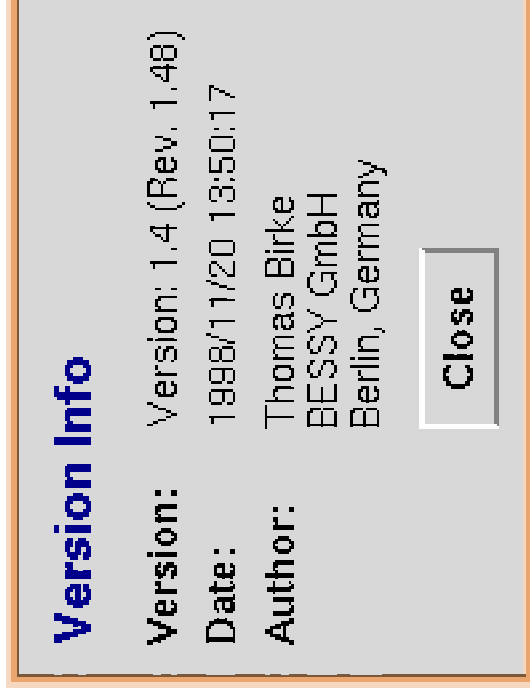


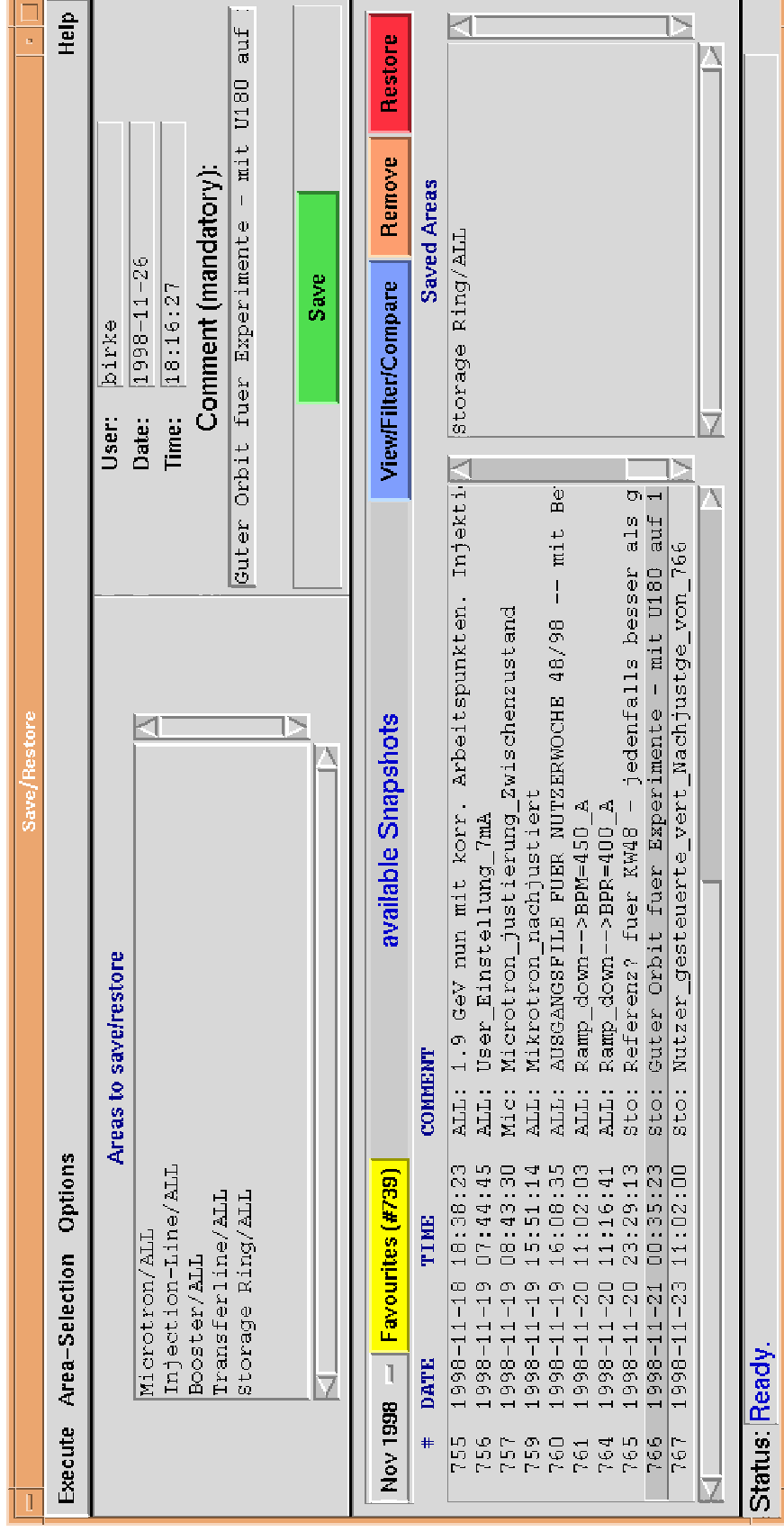
Save/Restore

A Tcl/Tk frontend for burt



Features

- save or restore any combination of machine-areas
- partial restore of snapshots



Features (cont.)

- view/filter/compare snapshots

View/Filter/Compare

List of Signals

BPR:set	614.502174
PKIK1D1R:set	11.5396385
PKIK2D1R:set	11.5396385
PKIK3D1R:set	11.5553434
PKIK4D1R:set	11.4049744
PRBK1D1R:set	1.3811711
PRBK2D1R:set	1.3786445
DIAG1WR:offset	31939
DIAG1WR:switch	ON
DIAG2WR:offset	0

Signal file: fitout1888-11-26_18:18:42_0

Filter:

Compare Tolerance (%):

View/Filter/Compare

List of Signals

Q1 PR:set	18.25
Q2 PR:set	18.25
Q3 PR:set	18.25
Q4 PR:set	133.182
Q3 PDR:set	182.91449
Q3 PTR:set	212.36649
Q4 PDR:set	132.520038
Q4 PTR:set	247.255034
Q5 PDR:set	219.655673
Q1 PDR:set	218.345

Signal file: fitout1888-11-26_18:16:42_1

Filter:

Compare Tolerance (%):

View/Filter/Compare

List of Signals

R84P2T7R:set	0.074175253
R84P2T8R:set	0.295641332
V82PID1R:set	0.0265496257
V82PID2R:set	-0.0310311692
V82PID3R:set	-0.0695763675
V82PID4R:set	-0.0967666653
V82PID5R:set	0.390122489
V82PID6R:set	0.0020034481
V82PID7R:set	0.000839037038
V82PID8R:set	-0.00596332454

Signal file: fitout1888-11-26_18:20:16_0

Filter:

Compare Tolerance (%):

Features (cont.)

- compare (optionally parts of)
 - setpoints of two snapshots
 - readbacks of two snapshots
 - setpoints with its readbacks

Compare - Results (readbacks)

01:35:25 Stop: 11:06:00 Stop: Filter: _gesteuerte_wert_bachbus

Signal	Guiter Orca1 fuer Expo: memie	memie	Guiter Orca1 fuer Expo: wert_bachbus	delta	delta
				[abs]	[%]
VS3-E1-53: rxbk	-0.0787462777	-0.0787462777	0	0	0
VS1-E1-62: rxbk	-0.0740071030	-0.0740071030	0	0	0
VS3-E1-72: rxbk	0.162273458	0.162273458	0	0	0
VS3-E1-78: rxbk	-0.142735353	-0.142735353	0	0	0
VS3-E2-31: rxbk	-0.132076537	-0.132076537	+0.000243019671	-0.000243019671	-0.18793
VS3-E2-32: rxbk	-0.136010020	-0.136010020	0	0	0
VS3-E2-33: rxbk	-0.0379231055	-0.0379231055	-0.000243019671	-0.000243019671	0.282037
VS3-E2-34: rxbk	0.0569205436	0.0569205436	0	0	0
VS3-E2-35: rxbk	0.1622826825	0.1622826825	0	0	0
VS3-E2-36: rxbk	0.0499759315	0.0499759315	0	0	0
VS3-E2-37: rxbk	0.0021001353	0.0021001353	0	0	0
VS3-E2-38: rxbk	-0.0479910116	-0.0479910116	0	0	0
VS3-E2-39: rxbk	-0.279892831	-0.279892831	0	0	0
VS3-E2-24: rxbk	0.120909557	0.120909557	0	0	0
VS3-E2-23: rxbk	-0.0296383828	-0.0296383828	0	0	0
VS3-E2-43: rxbk	-0.178698215	-0.178698215	0	0	0
VS3-E2-52: rxbk	0.029063036	0.029063036	0	0	0
VS3-E2-53: rxbk	0.125370015	0.125370015	-0.000243019671	-0.000243019671	-0.634921
VS3-E2-54: rxbk	0.276913935	0.276913935	0	0	0
VS3-E2-58: rxbk	-0.0663452941	-0.0663452941	0	0	0
VS3-E2-59: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-60: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-61: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-62: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-63: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-64: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-65: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-66: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-67: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-68: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-69: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-70: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-71: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-72: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-73: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-74: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-75: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-76: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-77: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-78: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-79: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-80: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-81: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-82: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-83: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-84: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-85: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-86: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-87: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-88: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-89: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-90: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-91: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-92: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-93: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-94: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-95: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-96: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-97: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-98: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-99: rxbk	0.000243019671	0.000243019671	0	0	0
VS3-E2-100: rxbk	0.000243019671	0.000243019671	0	0	0

Print/Save/Mail

Save/Restore

Execute Area Selection Options

Areas to view/compare/restore (set "Area Selection" menu)

Injektion="1" vs "ant.

Booster/ALS

Trans-VertLine/ALL

Storage Ring/ALL

Compare Tiders for: [0.1] %

Compare Readbacks only Compare stored Settings with s

Compare Snapshots

First Snapshot

View/Filter/Compare Remove Restore

Saved Areas

Storage Ring/ALL

DATE	TIME	COMMENT
1998-11-18 18:38:23		ALL: 1.4 BSV nur mit Netz. Arbeitspunkte. Injektion
1998-11-19 7:44:45		ALL: User_Einstelle-11.18.7MA
1998-11-19 28:43:30		Mic: Mikrotron_Justicierung_Zwischenanstabe
1998-11-19 15:51:14		ALL: mikrotron_Backjustiert
1998-11-19 16:10:05		ALL: AUSRUFKAPITEL FUR NUTZERVOICHER 407/30 -- mit Be
1998-11-20 11:32:03		ALL: Ramp down ->BBP=152 A
1998-11-20 11:16:41		ALL: Ramp down-->BBP=152 A
1998-11-20 23:28:43		ALL: McForma/ fuer KW43 - Jederialls besser als g
1998-11-20 10:10:00		Stop: Guiter Orca1 fuer Experimentierk mit "10" auf 1
1998-11-23 11:12:00		Stop: Nutzer gesteuerte wert Nachjustage von 165

Second Snapshot

View/Filter/Compare Remove Restore

Saved Areas

Storage Ring/ALL

DATE	TIME	COMMENT
1998-11-10 10:57:00		ALL: 1.4 BSV nur mit Netz. Arbeitspunkte. Injektion
1998-11-19 27:44:45		ALL: User_Einstellung 7MA
1998-11-19 28:43:30		Mic: Mikrotron_Justicierung_Zwischenanstabe
1998-11-19 15:51:14		ALL: mikrotron_Backjustiert
1998-11-19 16:10:05		ALL: AUSGANGSFELD FUR NUTZERVOICHER 487/38 -- mit Be
1998-11-20 11:32:03		ALL: Ramp down-->BBP=152 A
1998-11-20 11:16:41		ALL: Ramp down-->BBP=152 A
1998-11-20 23:29:43		Stop: Referenz? fuer KW43 - Jederialls besser als g
1998-11-21 10:13:23		Stop: Guiter Orca1 fuer Experimentierk mit "10" auf 1
1998-11-23 11:12:00		Stop: Nutzer gesteuerte wert Nachjustage von 165

Status: Ready.

“excessively” used Features

- Make full-sized snapshots and restore parts of it
 - Make snapshots of optimized parts of the machine and restore these with other machine-states
 - *all* compare functions

 - user doesn't have to handle/recognize filenames
 - user gives verbose comments to identify snapshots
- snapshot-files are *hidden* and can be extracted explicitly for post-processing

Abstractions

Experiences

- *very good acceptance*
- up to now more than 750 snapshots!

Save/Restore has proven one of the most important applications during commissioning

Requirements for Installation

- extended Tcl/Tk 8.0 (wishx8.0)
- `burt` (`burtb`, `burtwb` and `burtconvertsnap`) have to be installed
- SDDS (`sddsconvert`, `-2stream`, `-sort`, `-xref` and `-process`) **has to be installed**
- command-line `print-`, `mail-` and `rsh-`programs
- request-file-hierarchy
created manually or by a program/script
- source-code available at

<http://www.bessy.de/control/SoftDist/SaveRestore/>