SMARTSUITE

inWay

intelligence inside

Network Management *Solutions*

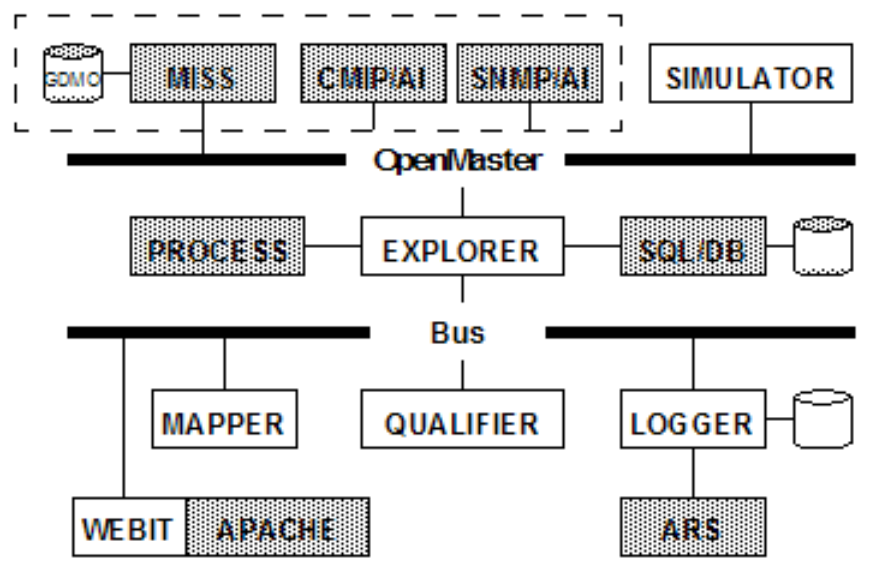
Overview

- Set of ready-to-use applications designed to cover all aspects of a network management solution
- Based on OpenMaster by Evidian
- New products in response to real constraints with an amazing adaptability
- Strong architecture, simplicity, efficiency, reusability, finished quality

Products

- **Explorer** : network elements (MIB), database and process surveillance
- **Mapper** : network mapping and monitoring
- **Logger** : alarm logging and processing
- **Simulator** : network simulation
- **WebIt** : PHP gateway to the Web
- **Broker** : process communications

Integration



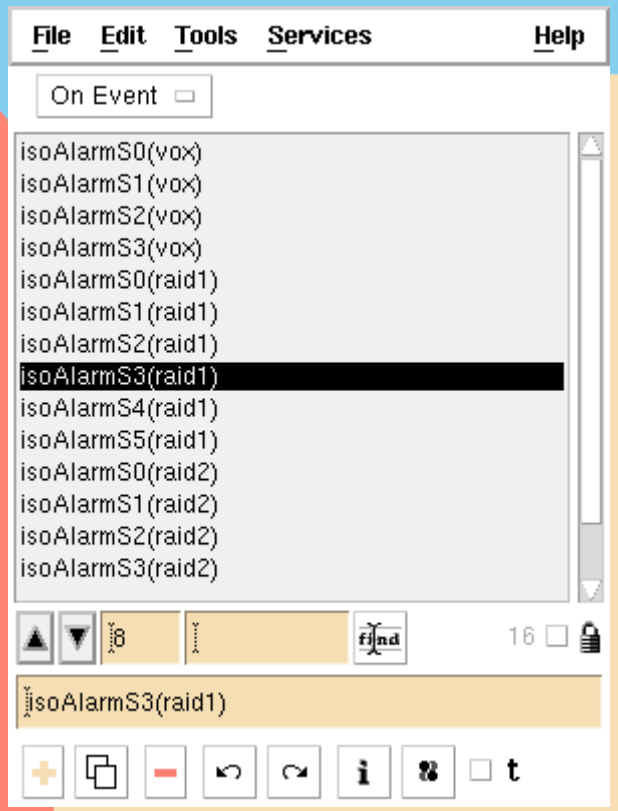
Explorer

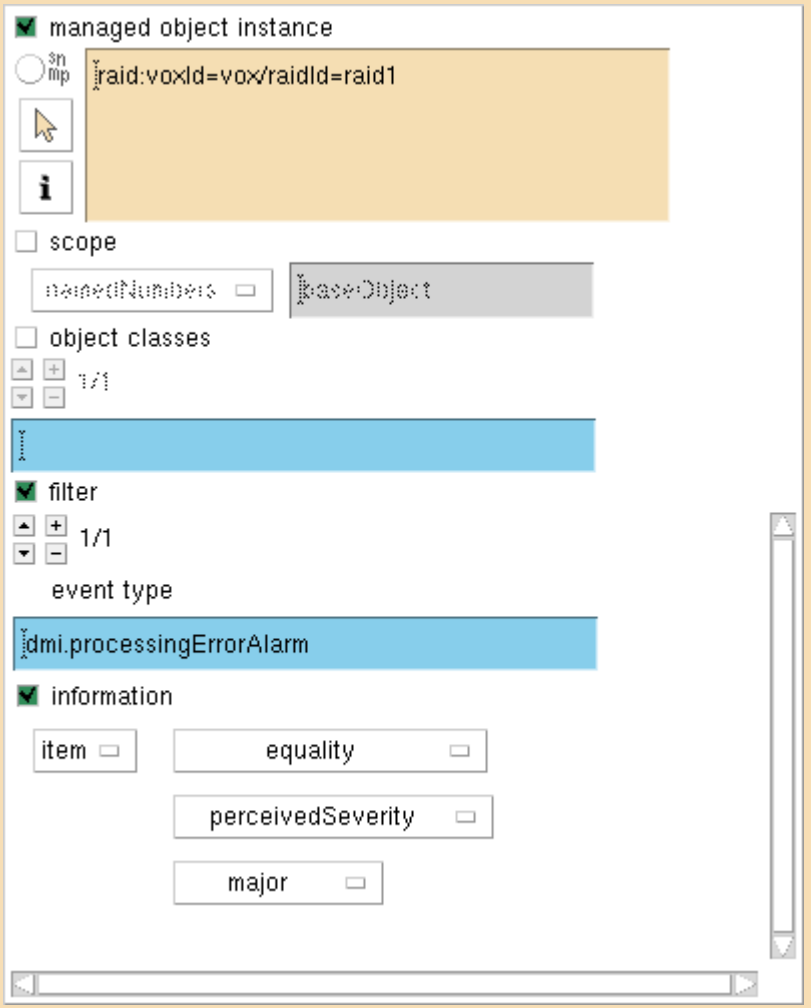
- Central component in a network surveillance solution
- Gathers, filters and correlates information from the network, a database, other processes
- Notifies client applications with messages accompanied by data extracted from the collected information

Explorer

- Relieves applications from the complex task of collecting and interpreting management information
- Designed to be as fast as possible in order to withstand a constant flow of information
- Drastically reduces traffic and processing time both in the network and the serviced applications

Explorer

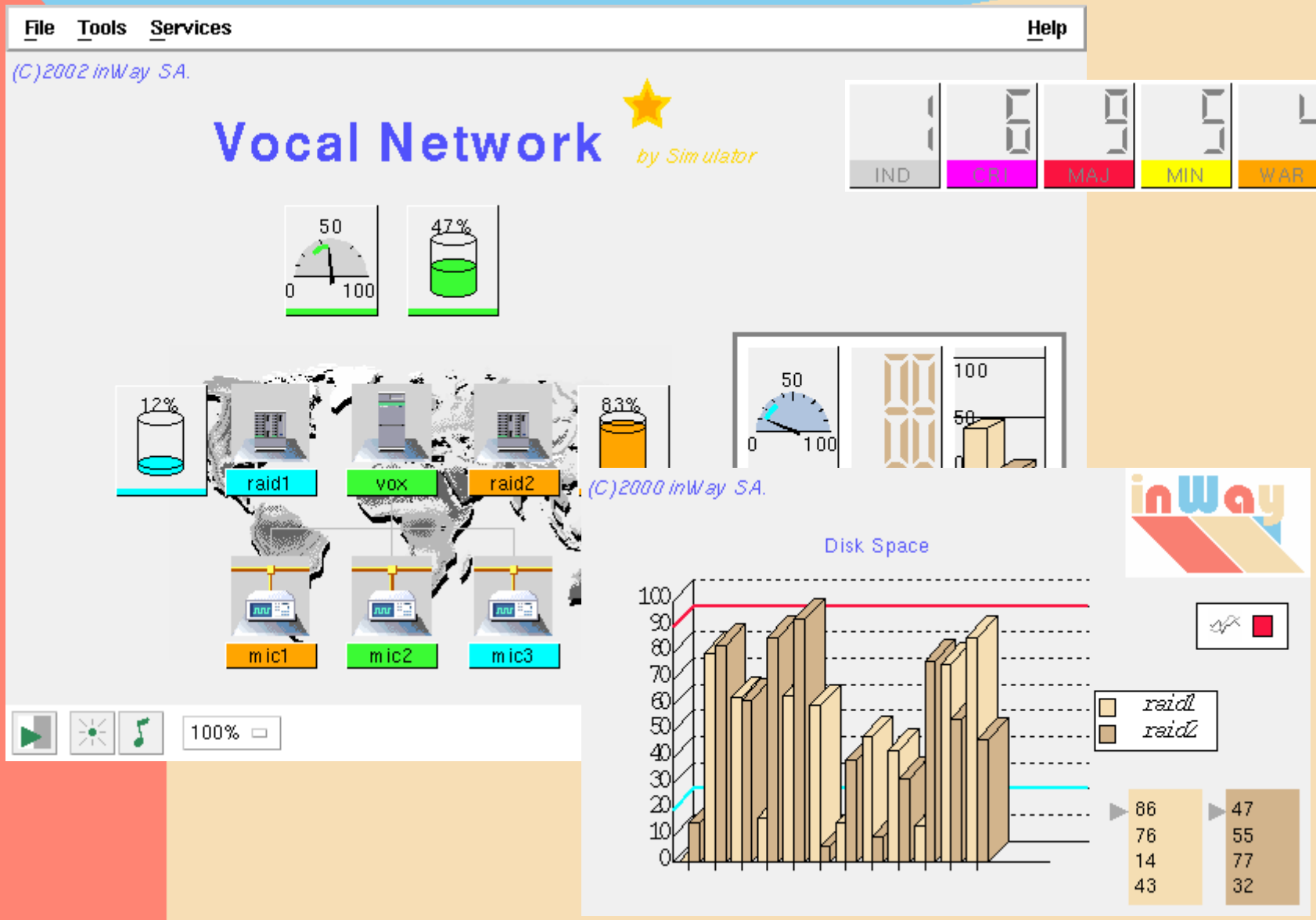

File
Edit
Tools
Services
Help
On Event
isoAlarmS0(vox)
isoAlarmS1(vox)
isoAlarmS2(vox)
isoAlarmS3(vox)
isoAlarmS0(raid1)
isoAlarmS1(raid1)
isoAlarmS2(raid1)
isoAlarmS3(raid1)
isoAlarmS4(raid1)
isoAlarmS5(raid1)
isoAlarmS0(raid2)
isoAlarmS1(raid2)
isoAlarmS2(raid2)
isoAlarmS3(raid2)
find
16
isoAlarmS3(raid1)


managed object instance
snmp
raid:voxId=vox/raidId=raid1
scope
1/1
filter
1/1
event type
dmi.processingErrorAlarm
information
item
equality
perceivedSeverity
major

Mapper

- Shows network elements in graphical maps of animated pictures and links
- Maps are animated by messages sent by the explorer or any other process
- Animation messages change graphical properties, play sound alerts
- Can run internal and external actions from contextual menus

Mapper


File
Tools
Services
Help
(C)2002 inWay SA.
Vocal Network
by Simulator
IND
CRI
MAJ
MIN
WAR
50
0
100
47%
12%
raid1
vox
raid2
8.3%
50
0
100
100
50
(C)2000 inWay SA.
inWay
Disk Space
100
90
80
70
60
50
40
30
20
10
0
raid1
raid2
86
76
14
43
47
55
77
32
100%

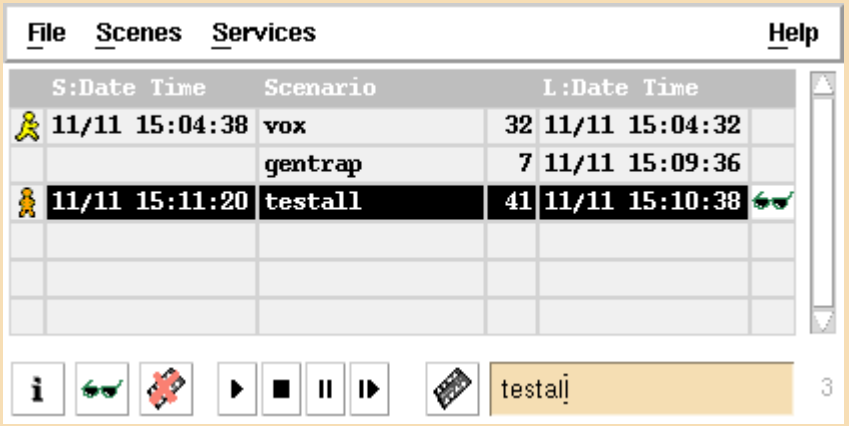
Simulator

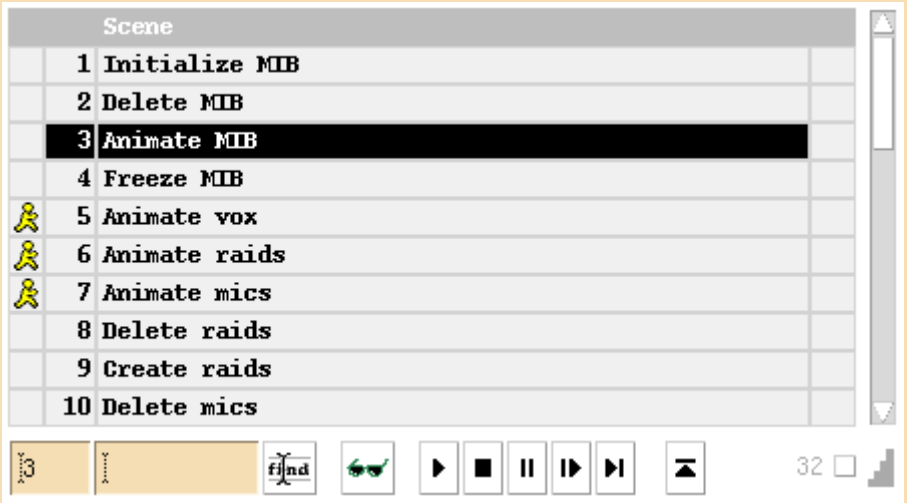
- Can emulate network elements or act on real systems
- Organizes a simulation into a series of scenes and actions called a scenario
- Can run multiple scenarios with concurrent scenes at the same time
- Used to test applications, train operators in extreme conditions, demonstrate solutions

Simulator

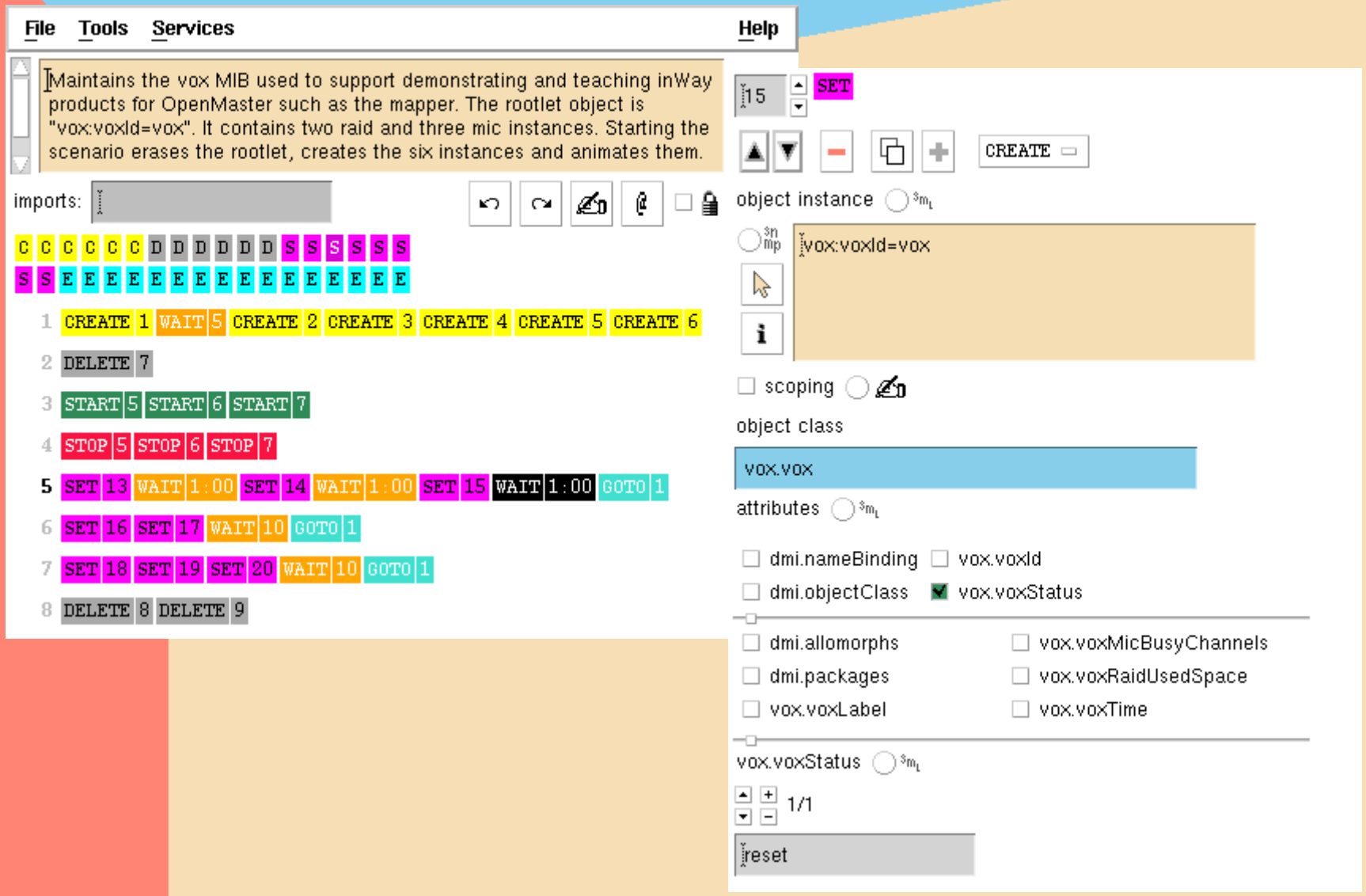
- Provides network actions for creating, deleting and setting MIB instances, retrieving values, sending any kind of actions, events or SNMP traps
- Includes processing actions which can start and stop other scenes, add delays, break the flow with IF and GOTO statements, pass context values between actions, run external code

Simulator


File
Scenes
Services
Help
S:Date Time
Scenario
L:Date Time
11/11 15:04:38
vox
32
11/11 15:04:32
gentrap
7
11/11 15:09:36
11/11 15:11:20
testall
41
11/11 15:10:38
testall
3


Scene
1 Initialize MIB
2 Delete MIB
3 Animate MIB
4 Freeze MIB
5 Animate vox
6 Animate raids
7 Animate mics
8 Delete raids
9 Create raids
10 Delete mics
3
find
32

Simulator


File
Tools
Services
Help
Maintains the vox MIB used to support demonstrating and teaching inWay products for OpenMaster such as the mapper. The rootlet object is "vox:voxId=vox". It contains two raid and three mic instances. Starting the scenario erases the rootlet, creates the six instances and animates them.
imports:
C C C C C C D D D D D D S S S S S S
S S E E E E E E E E E E E E E E E E
1 CREATE 1 WAIT 5 CREATE 2 CREATE 3 CREATE 4 CREATE 5 CREATE 6
2 DELETE 7
3 START 5 START 6 START 7
4 STOP 5 STOP 6 STOP 7
5 SET 13 WAIT 1:00 SET 14 WAIT 1:00 SET 15 WAIT 1:00 GOTO 1
6 SET 16 SET 17 WAIT 10 GOTO 1
7 SET 18 SET 19 SET 20 WAIT 10 GOTO 1
8 DELETE 8 DELETE 9
15
SET
CREATE
object instance
vox:voxId=vox
scoping
object class
vox.vox
attributes
dmi.nameBinding
vox.voxId
dmi.objectClass
vox.voxStatus
dmi.allomorphs
vox.voxMicBusyChannels
dmi.packages
vox.voxRaidUsedSpace
vox.voxLabel
vox.voxTime
vox.voxStatus
1/1
reset

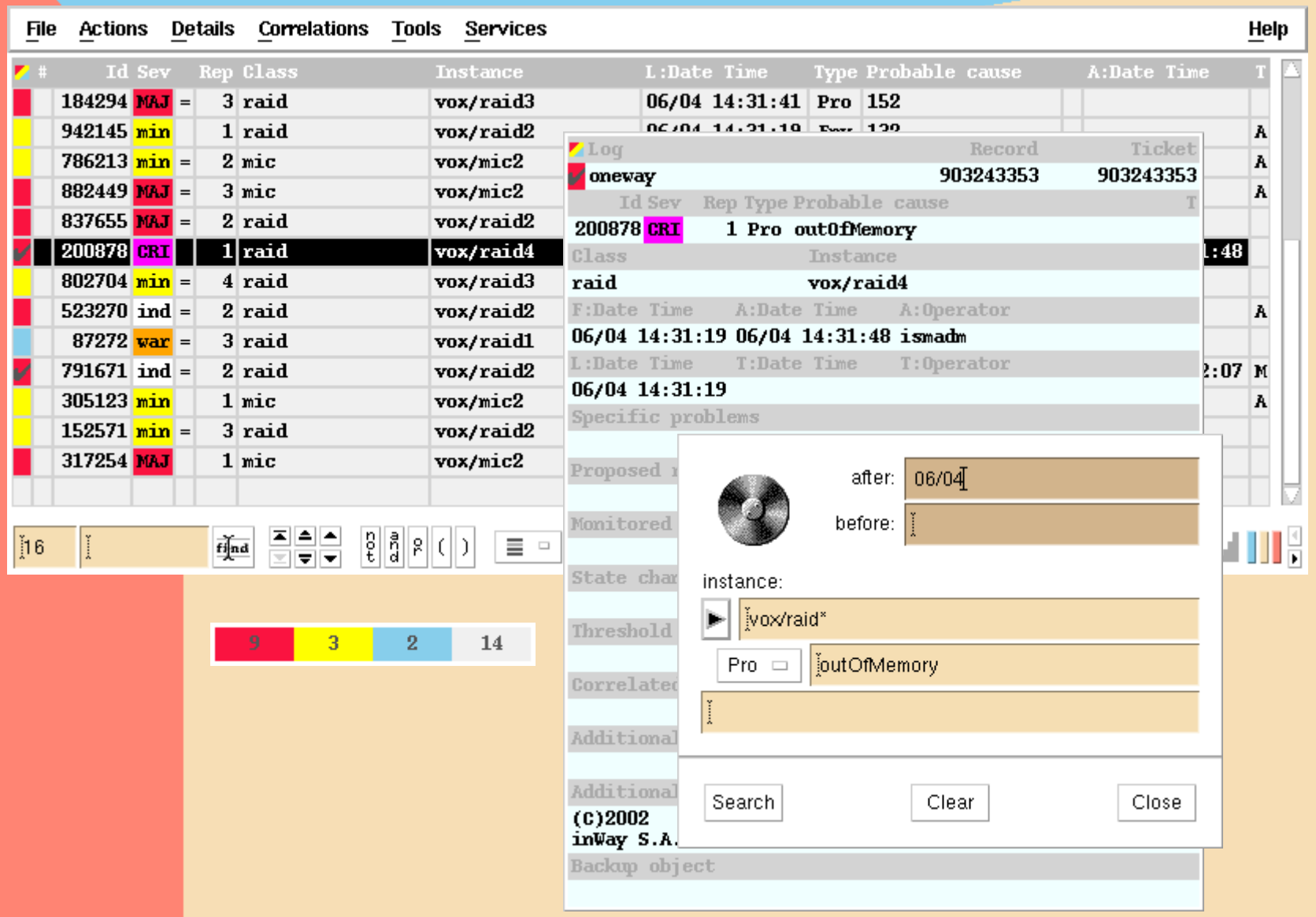
Logger

- Saves active alarms, historical alarms and correlated events on disk
- Protects access to the logs with keys and processing rules
- Can be configured to log any kind of data
- Interfaced with a trouble ticketing system (ARS)

Logger

- Displays alarm and event log records in tables and detailed forms with formatted and colored text or graphics
- Can sort, filter, count alarms
- Can acknowledge, terminate alarms
- Can list correlated events
- Can open and close trouble tickets

Logger

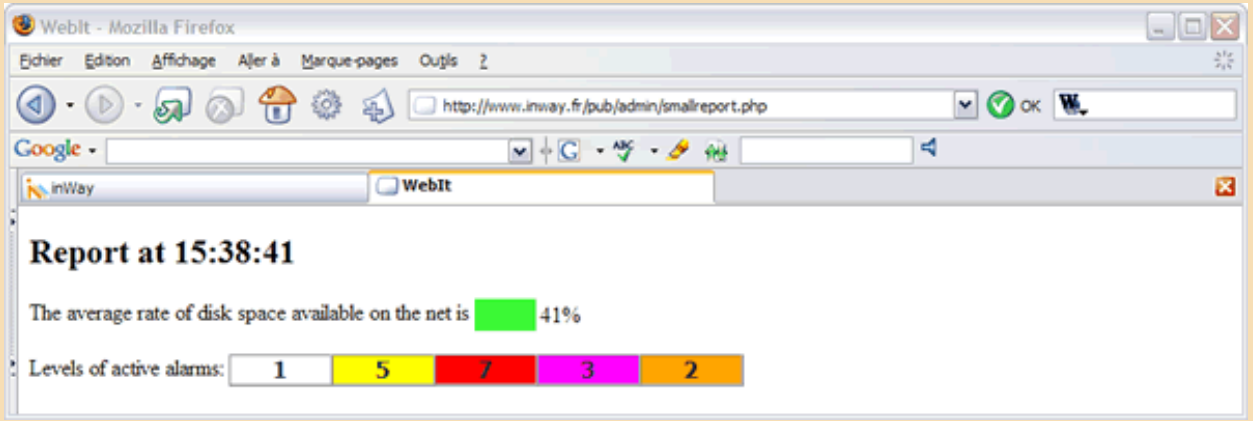

File
Actions
Details
Correlations
Tools
Services
Help
Id Sev Rep Class Instance L:Date Time Type Probable cause A:Date Time T
184294 MAJ = 3 raid vox/raid3 06/04 14:31:41 Pro 152
942145 min 1 raid vox/raid2
786213 min = 2 mic vox/mic2
882449 MAJ = 3 mic vox/mic2
837655 MAJ = 2 raid vox/raid2
200878 CRI 1 raid vox/raid4
802704 min = 4 raid vox/raid3
523270 ind = 2 raid vox/raid2
87272 war = 3 raid vox/raid1
791671 ind = 2 raid vox/raid2
305123 min 1 mic vox/mic2
152571 min = 3 raid vox/raid2
317254 MAJ 1 mic vox/mic2
Log Record Ticket
oneway 903243353 903243353
Id Sev Rep Type Probable cause T
200878 CRI 1 Pro outOfMemory
Class Instance
raid vox/raid4
F:Date Time A:Date Time A:Operator
06/04 14:31:19 06/04 14:31:48 ismadm
L:Date Time T:Date Time T:Operator
06/04 14:31:19
Specific problems
Proposed
Monitored
State char
Threshold
Correlated
Additional
Additional
(C)2002
inWay S.A.
Backup object
after: 06/04
before:
instance:
vox/raid*
Pro
outOfMemory
Search
Clear
Close
16
find
not
and
or
( )
9
3
2
14

WebIt

- Gives complete access in PHP to all SmartSuite services and applications
- Can dynamically and transparently make available on the Web, via an Apache or an IIS server, in a secure way and without any deployment, all the information elaborated on the network administration platform

WebIt

- Adds the possibility to freely use all the technologies found on the web like Apache and IIS servers, PHP, HTML and XML formats, XSL and XPATH translators, .NET, Java, JavaScript and Flash



Broker

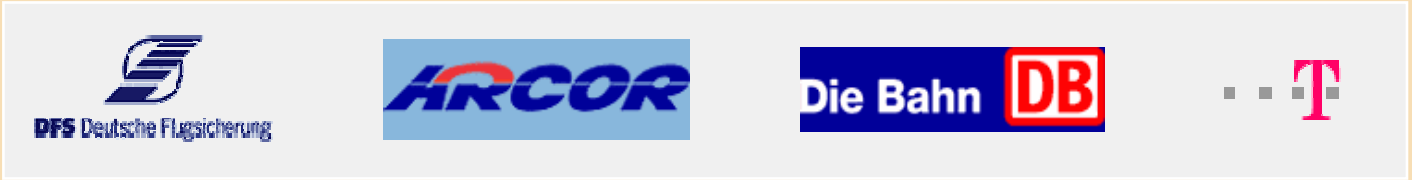
- Turns any application into a distributed service without any extra code on the server or the client side
- Used for communications between SMARTSUITE applications and exchanges with foreign processes

Toolkit

- Set of the object classes used to write all SMARTSUITE products
- Assures an economy of means and an overall coherence
- Used to develop specific extensions or complete applications integrated with SMARTSUITE products

References

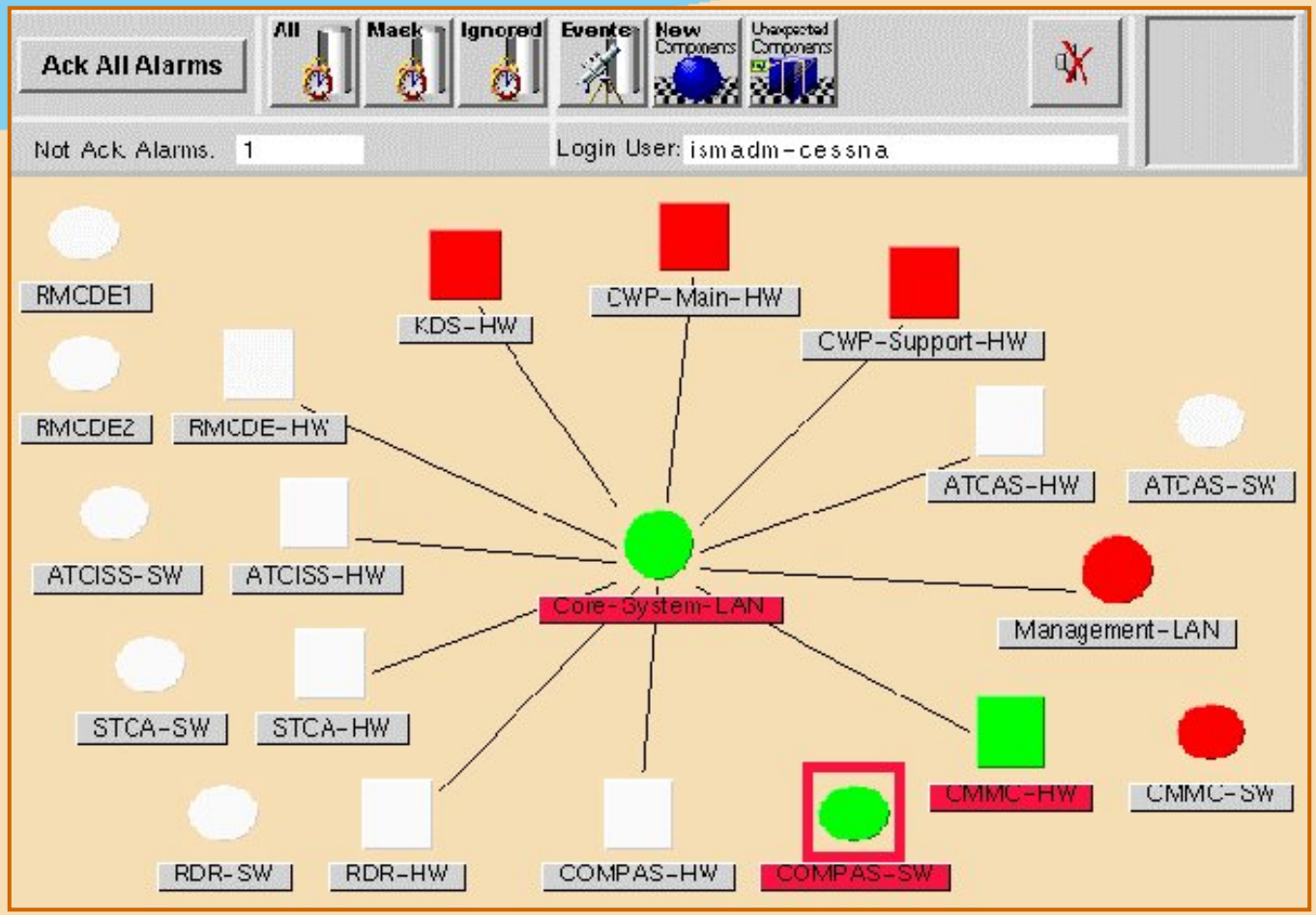
- The SMARTSUITE is in operation at the core of many large area network management solutions



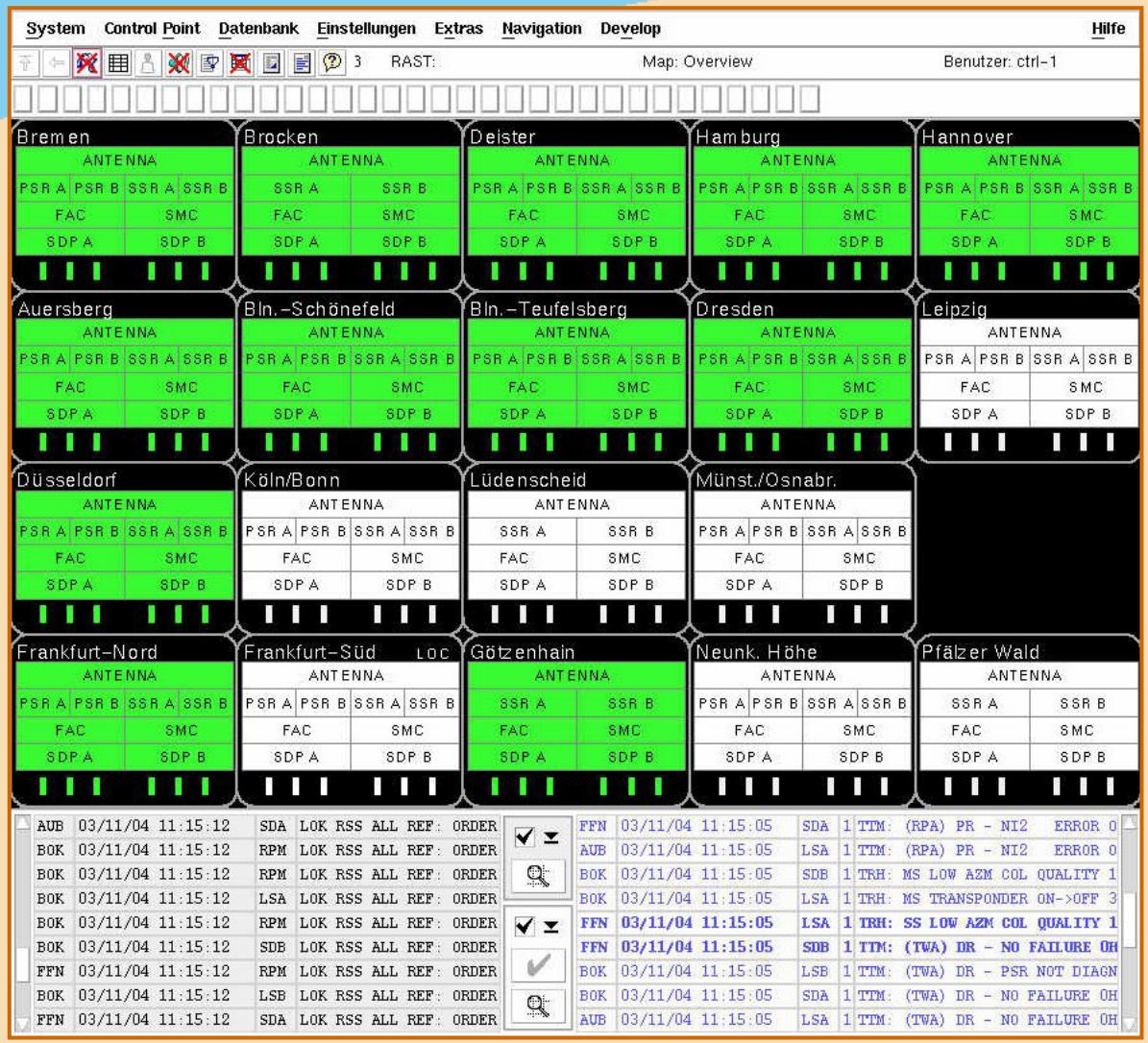
Deutsche Flugsicherung

- Passenger air traffic control all over Germany
- CMMC - control rooms
- Mac/s - radars (29 stations)
- TOWER - control towers (100,000 managed objects)
- DFS has placed **inWay** and the SMARTSUITE at the top of its list of recommended software providers

CMMC


Ack All Alarms
All
Mask
Ignored
Events
New Components
Unexpected Components
Not Ack Alarms. 1
Login User: ismadm-cessna
RMCDE1
RMCDE2
RMCDE-HW
KDS-HW
CWP-Main-HW
CWP-Support-HW
ATCAS-HW
ATCAS-SW
ATCISS-SW
ATCISS-HW
Core-System-LAN
Management-LAN
STCA-SW
STCA-HW
CMMC-HW
CMMC-SW
RDR-SW
RDR-HW
COMPAS-HW
COMPAS-SW

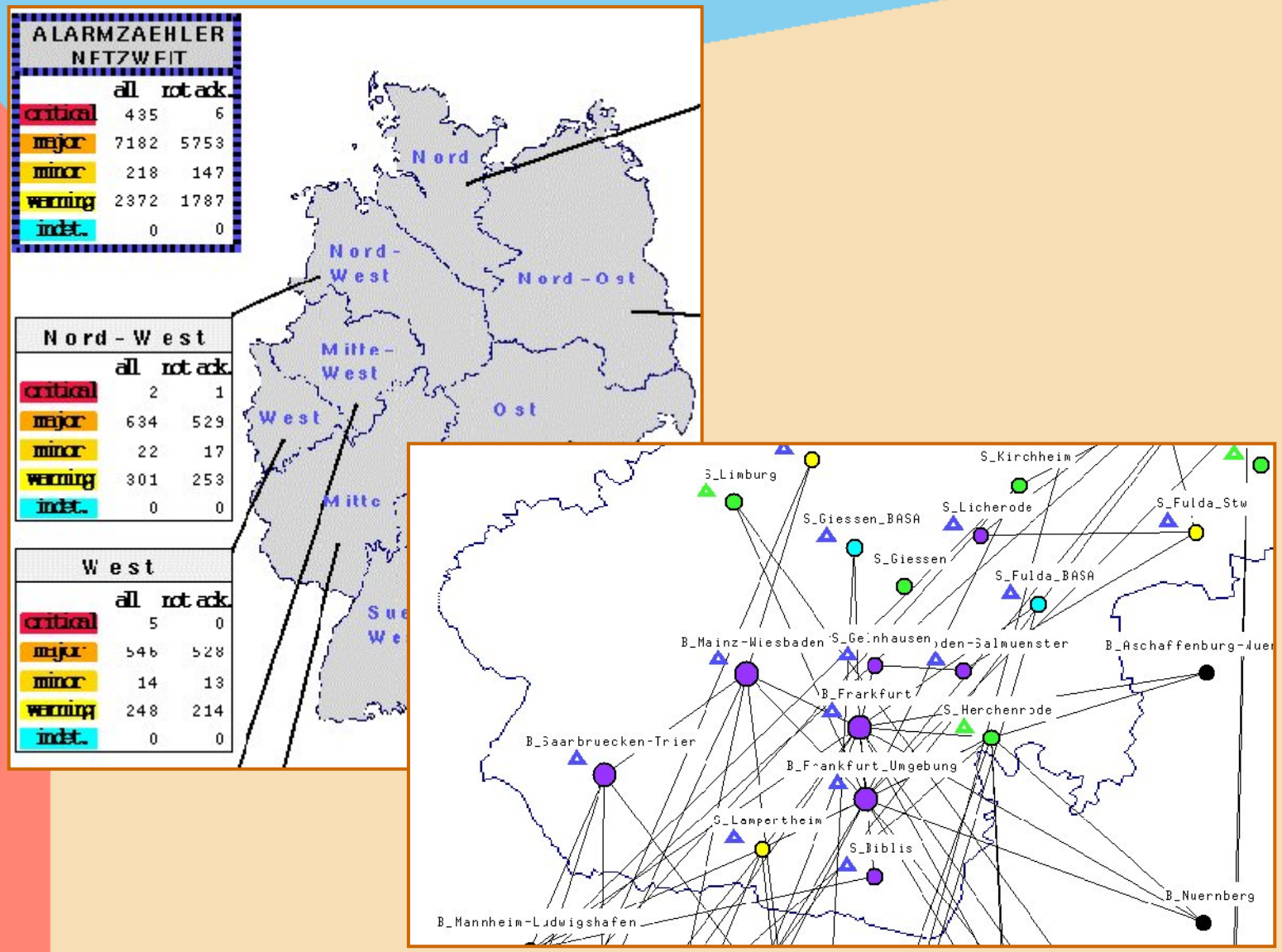
MaC/S


System Control Point Datenbank Einstellungen Extras Navigation Develop Hilfe
RAST: Map: Overview Benutzer: ctrl-1
Bremen
Brocken
Deister
Hamburg
Hannover
Auersberg
Bln.-Schönefeld
Bln.-Teufelsberg
Dresden
Leipzig
Düsseldorf
Köln/Bonn
Lüdenscheid
Münst./Osnabr.
Frankfurt-Nord
Frankfurt-Süd Loc
Götzenhain
Neunk. Höhe
Pfälzer Wald
ANTENNA
PSR A PSR B SSR A SSR B
SSR A SSR B
FAC SMC
SDP A SDP B

Arcor

- IFM-T - fixed phone network
- Replaces 14 different types of surveillance systems
- Manages more than 1,000,000 physical and logical termination points
- Abstract from the company magazine:
  - *operators say the new surveillance system is fully satisfactory*

IFM


ALARMZAEHLER NETZWEIT
all not ack.
critical 435 6
major 7182 5753
minor 218 147
warning 2372 1787
indet. 0 0
Nord-West
all not ack.
critical 2 1
major 634 529
minor 22 17
warning 301 253
indet. 0 0
West
all not ack.
critical 5 0
major 546 528
minor 14 13
warning 248 214
indet. 0 0
Nord
Nord-West
Nord-Ost
Mitte-West
West
Ost
Mitte
S_Limburg
S_Kirchheim
S_Giessen_BASA
S_Licherode
S_Fulda_Stw
S_Giessen
S_Fulda_BASA
B_Mainz-Wiesbaden
B_Aschaffenburg-Auer
B_Frankfurt
S_Herchenrode
B_Saarbruecken-Trier
B_Frankfurt_Umgebung
S_Lampertheim
S_Biblis
B_Nuernberg
B_Mannheim-Ludwigshafen

Die Bahn

- IFM-G - GSM/R
- Replaces 6 different types of surveillance systems
- Manages 2,600 GSM radio stations

Prices

- One license per product
- Simple license - limited to one workstation at one time
- Multiple license - limited to one project with an unlimited number of workstations
- Maintenance and product upgrades is 15% per year of the total license cost

Contact

- All SMARTSUITE products are available for a trial period free of charge
- Please visit our web site www.inway.fr
- For more information, call **Eric Companie** at +**33 (0)3 29 42 03 59** or email at *eric.companie@inway.fr*
- *Thank you for your interest in* **inWay**