



30<sup>TH</sup> WORLD RADIOCOMMUNICATION SEMINAR

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Geneva, Switzerland



# **BRSIS** **BR Space Information System**

Fabrice Evangelisti – BR-IAP-SAS

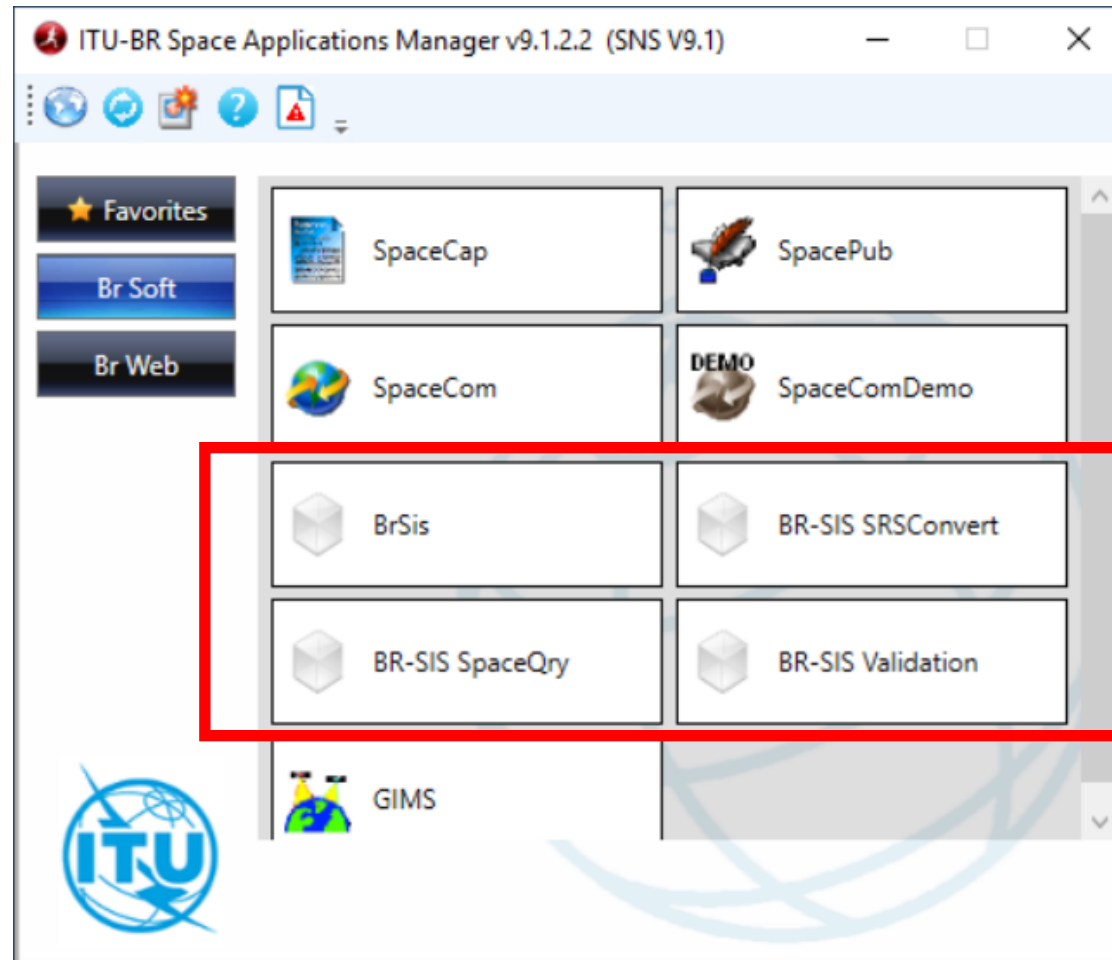
[www.itu.int/go/wrs-22](http://www.itu.int/go/wrs-22)

#ITUWRS






# SAM






# SAM

 Add to favorites

ITU-BR Space Applications Manager v9.1.2.99 (SNS V9.1) Beta

BrSis SpaceCap

Br Soft  
Br Web  
Setup





# Space Information System (SNS v9.1)

## Selected task:

SpaceQry 	SRS convert 	Validation 
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## Selected database:

+ New Window

Start

Quit

Selected task

Selected database

evangeli



**BRSIS in ITU**



## Space Information System (SNS v9.1)

### Selected task:

CFEX 	Cost Recovery 	FindCap 	PCom 
Publication 	SpaceQry 	SRS Convert 	Status Review 
TEX 	Validation 		

### Selected database:

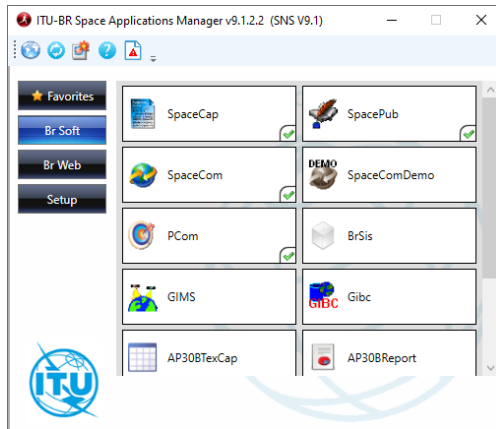
+ New Window

Start  
Quit

Selected task  
 Selected database

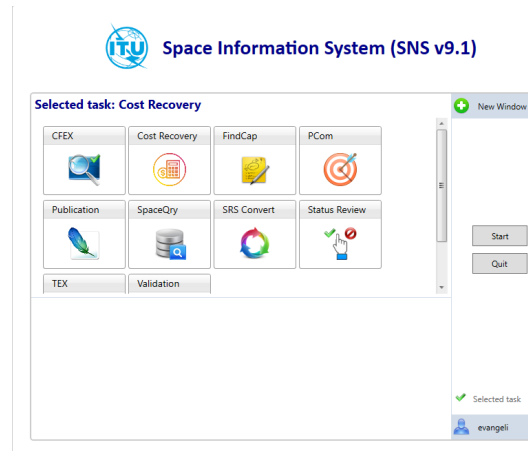
evangeli

# Future of BR Space Software



## Current BR Software

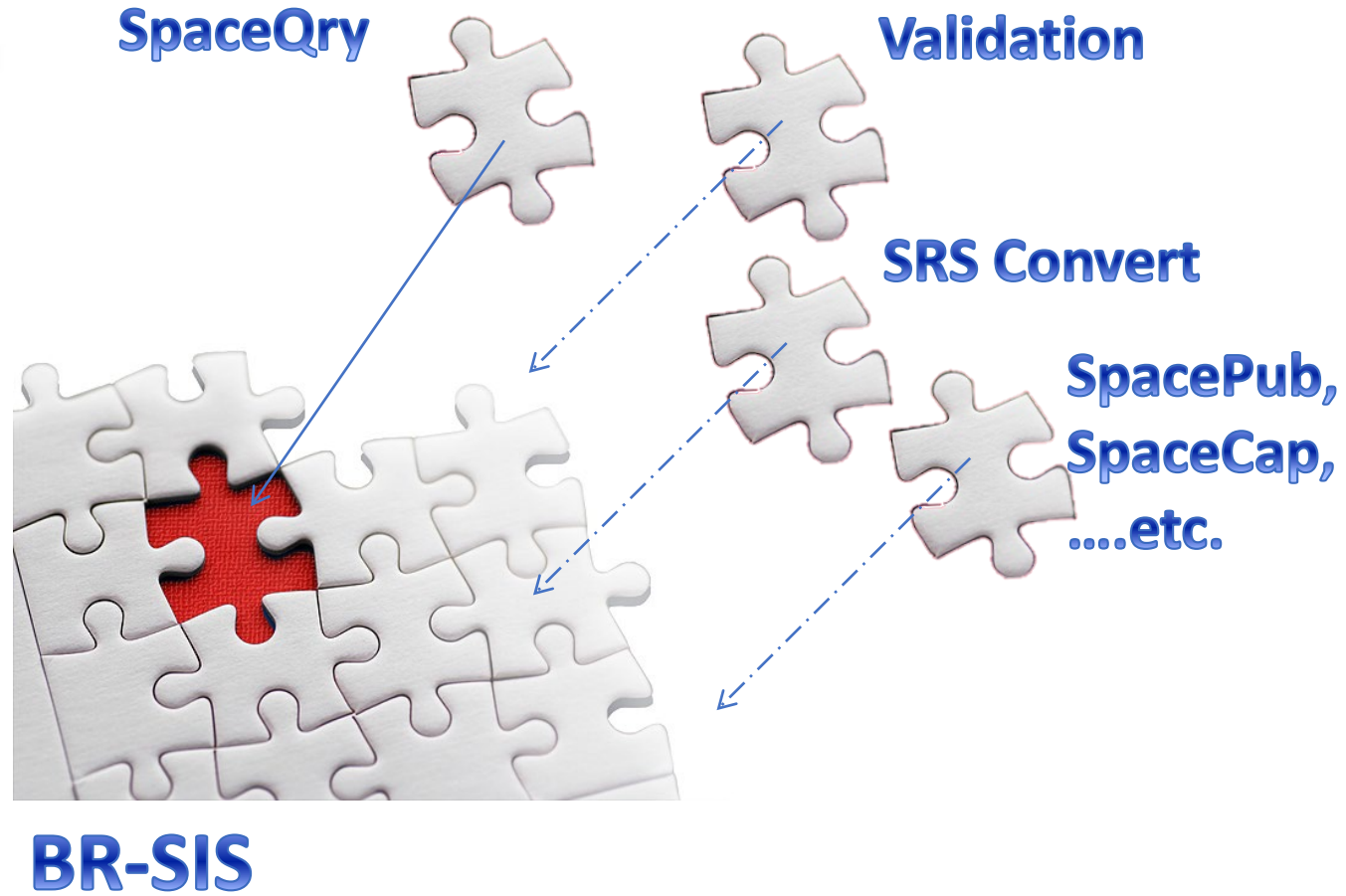
- Several old applications
- Different look and feel
- Different programming language



## Future BR Space Information System

- Single user interface
- Consistent look and feel
- Rich user experience
- Gain in terms of training and productivity
- Seamless integration with existing and future applications

# Evolving System “building blocks”



# BRSIS-SpaceQry

The screenshot displays the ITU Space Information System (SNS v9.1) interface. At the top, the ITU logo and the text "Space Information System (SNS v9.1)" are visible. The main content area is titled "Selected task: SpaceQry" and contains a task card for "SpaceQry" with the following details:

- Version: 9.1.0.0 ([what's new?](#))
- Description: Query SNS formatted databases
- Contact: [brsas@itu.int](mailto:brsas@itu.int)

To the right of the task card are two sub-tasks: "SRS convert" (with a circular arrow icon) and "Validation" (with a database icon and a green checkmark). Below the task card is the "Selected database:" section, which includes radio buttons for "Microsoft Access" (selected) and "BR IFIC DVD", a text input field, and a "Browse" button. On the right side of the interface, there is a "New Window" button with a plus sign, "Start" and "Quit" buttons, and a status bar at the bottom showing a green checkmark for "Selected task", a red X for "Selected database", and the user name "evangeli" with a settings gear icon.



# SpaceQry main screen

BRSIS - SpaceQry v9.1.0.0

The screenshot displays the SpaceQry application interface. At the top, there are navigation icons for Home, Settings, and Help. Below these are buttons for 'Set search criteria', 'Favorites', 'Clear', and 'SQL'. A search bar with a magnifying glass icon and a 'Search' button is present. The main area is divided into a left sidebar for setting criteria and a right pane for displaying results. The sidebar includes sections for 'Type of notice' (with checkboxes for 'Non-Plan' and 'BSS/FSS Plan'), 'Administrative criteria' (with input fields for 'Notice Id.', 'Status', 'Admin.', 'Network Org.', 'BR IFIC no.', and 'Plan id.'), and 'Satellite criteria' (with checkboxes for 'Geostationary' and 'Non-Geostationary'). The right pane shows a table of results with columns: ntc\_id, ntc\_type, prov, act\_code, and adm. The table contains 3,611 rows of data.

ntc_id	ntc_type	prov	act_code	adm
=	BC	BC	BC	BC
79520001	G	9.6	M	INS
88964342	G	S9.6	M	J
90500004	G	RR1060		CHN
90500005	G	RR1060		CHN
90500006	G	RR1060		CHN
90500008	G	RR1060		CHN
90500009	G	9.6	M	CHN
90500010	G	RR1060		CHN
90500011	G	RR1060	M	CHN
90500022	G	9.6	M	AUS
90500023	G	9.6	M	AUS
90500025	G	RR1060		AUS
90500031	G	RR1060		AUS
90500034	G	RR1060	M	CHN
90500035	G	RR1060		CHN
90500036	G	RR1060		CHN
90500041	G	9.6	M	INS
90500048	G	RR1060		G

2  
Execute

1  
Set criteria

3  
Show results

# SpaceQry criteria tabs

**Standard**

**Type of notice**

*Non-Plan*

Advance Publication  
 Coordination  
 Coordination (Earth station)

*BSS/FSS Plan*

Plan  
 Pending  
 List  
 SOF Art. 2A

Notification  
 Due Diligence

**Administrative criteria**

Notice Id.  Status   
Admin.  Network Org.   
BR IFIC no.  Plan id.

**Satellite criteria**

Geostationary  Non-Geostationary

Satellite Name   
Orbital Position

**Earth/Radioastronomy criteria**

Specific  Typical  Radioastronomy

Station Name   
Country   
Longitude  Latitude

**Frequency criteria**

Freq. Min. (MHz)	Freq. Max. (MHz)
<input type="text"/>	<input type="text"/>

**Quick**

**Queries on frequencies**

- Network frequencies
- Frequencies which are unique within their beam
- Unique frequencies followed by all associated classes of station and beams
- Frequency summary: Frequencies which are unique within their beam and class of station
- Networks within specified frequency band and class of station.

**Queries on regulatory dates**

- Regulatory dates
- Regulatory dates and unique frequencies
- Regulatory dates and frequencies which are unique within their beam
- Networks for which the 4 months commenting period is still opened

**Queries on technical examination results**

- Findings
- Coordination status
- Networks affecting a given network

**Specific queries for BSS/FSS Plan**

- Reference Situation
- Reference Situation (Plan)
- Networks affecting a given Adm (Plan)
- Networks with the same grouping code
- Network configuration
- Suspended networks
- Strapping
- Power control

**Builder**

Select data items that you want to see in the query result

Select	Description	Field name
<input checked="" type="checkbox"/>	Beam name	beam_name
<input type="checkbox"/>	Emission indicator	emi_rcp
<input type="checkbox"/>	Group Id	grp_id
<input type="checkbox"/>	Class of station/Nature of se...	stn_cls, nat...
<input type="checkbox"/>	Country	ctry
<input type="checkbox"/>	Date of bringing into use	d_inuse
<input type="checkbox"/>	Date of protection	d_prot_eff
<input type="checkbox"/>	Date of publication (BR IFIC)	d_wic
<input type="checkbox"/>	Date of receipt (notice level)	d_rcv
<input type="checkbox"/>	Date of receipt (group level)	d_rcv
<input type="checkbox"/>	Coordination status	coord_pro...

**General parameters**

Notice Id.   
Satellite Name   
 Geostationary  Non-Geostationary  
Admin.  Network Org.   
Longitude from:  to:  degrees  
Frequency from:  to:  MHz

**Type of notice**

*Non-Plan*

Advance Publication  
 Coordination  
 Coordination (Earth station)

*BSS/FSS Plan*

Plan  
 Pending  
 List  
 SOF Art. 2A

Notification  
 Due Diligence

**SQL AdHoc**

Type your query here:

```
SELECT DISTINCT com_el.ntc_id,
com_el.sat_name, com_el.ntc_type, com_el.adm,
com_el.ntwk_org, com_el.ntf_rsn,
com_el.long_nom, s_beam.beam_name,
grp.grp_id, com_el.ctry, grp.d_inuse,
grp.d_prot_eff, com_el.d_rcv FROM com_el,
s_beam, grp WHERE (s_beam.ntc_id =
com_el.ntc_id AND grp.ntc_id = com_el.ntc_id
AND grp.beam_name = s_beam.beam_name AND
grp.emi_rcp = s_beam.emi_rcp AND
(com_el.sat_name = 'METEOR-3M'))
```

**AdHoc Query helper**

**Query template**

- Free form
- Standard network
- Network overlap
- Group overlap
- Frequency overlap

**SNS tables and fields (double-click to copy it in the query)**

Available tables:

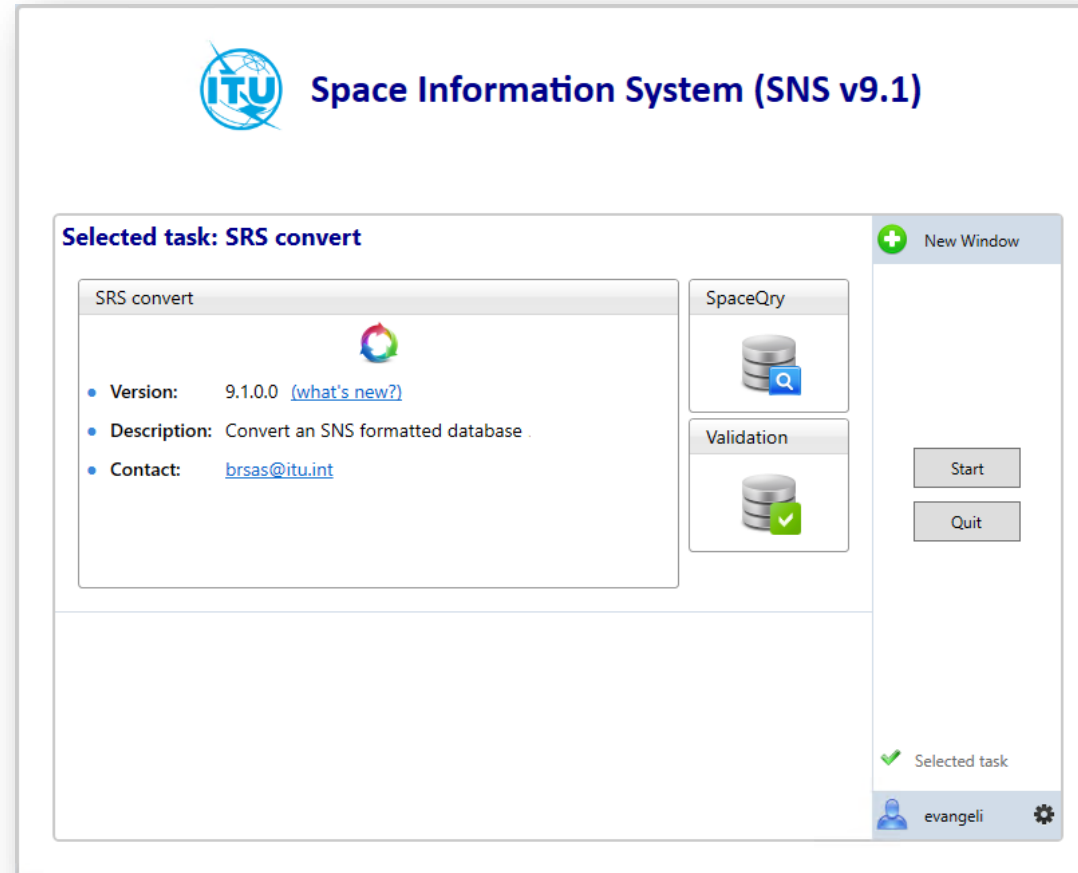
- geo
- gpub
- grp
- grp\_aff\_rec
- grp\_ink
- grp\_res35
- history

Related fields:

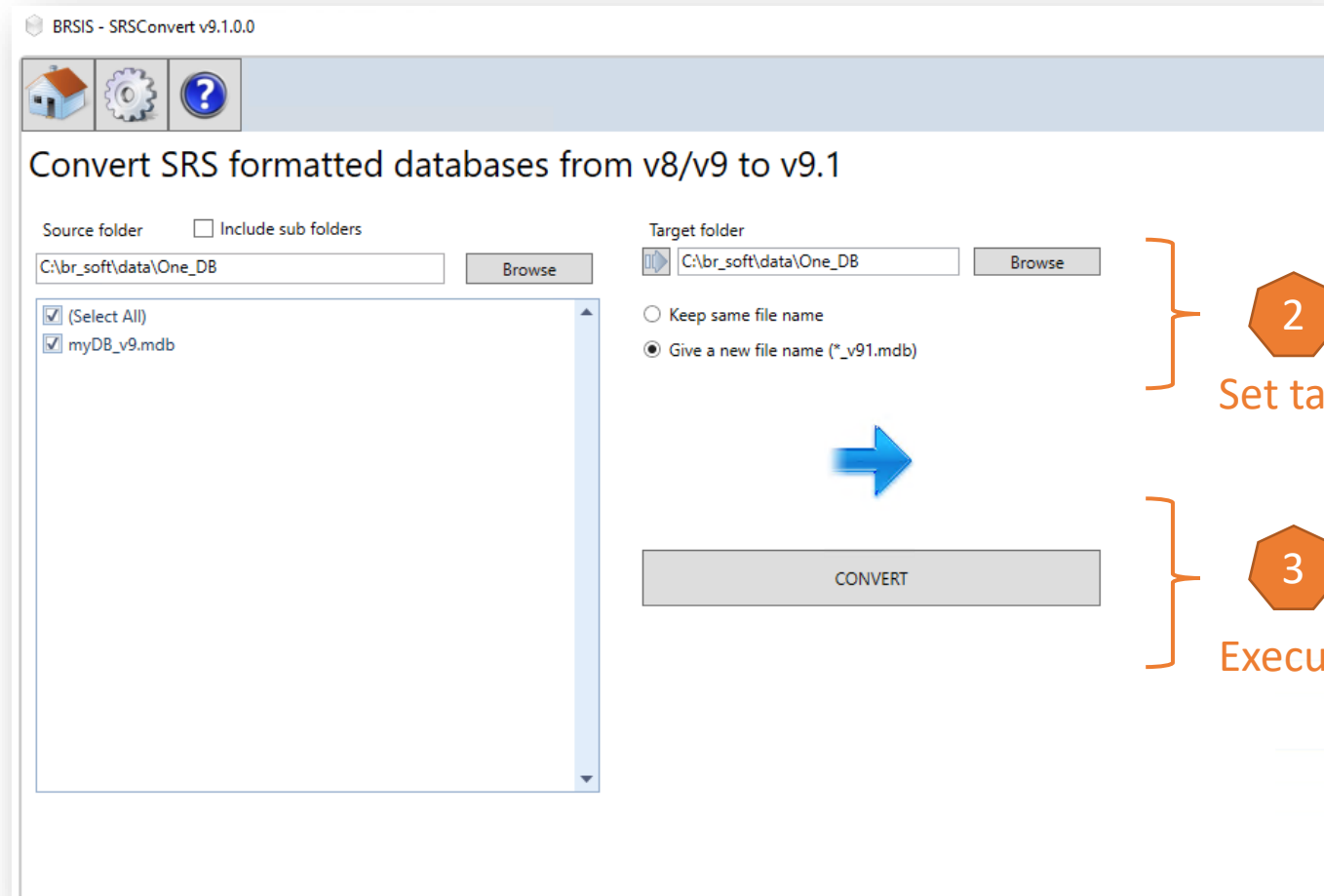
- act\_code
- adm\_resp
- area\_no
- bdwidth
- bdwidth\_aggr
- beam\_name
- cmp\_grp\_id

Qualified insertion  
 Field description

# BRSIS-SRS convert



# SRS convert – one database



1

Set source folder

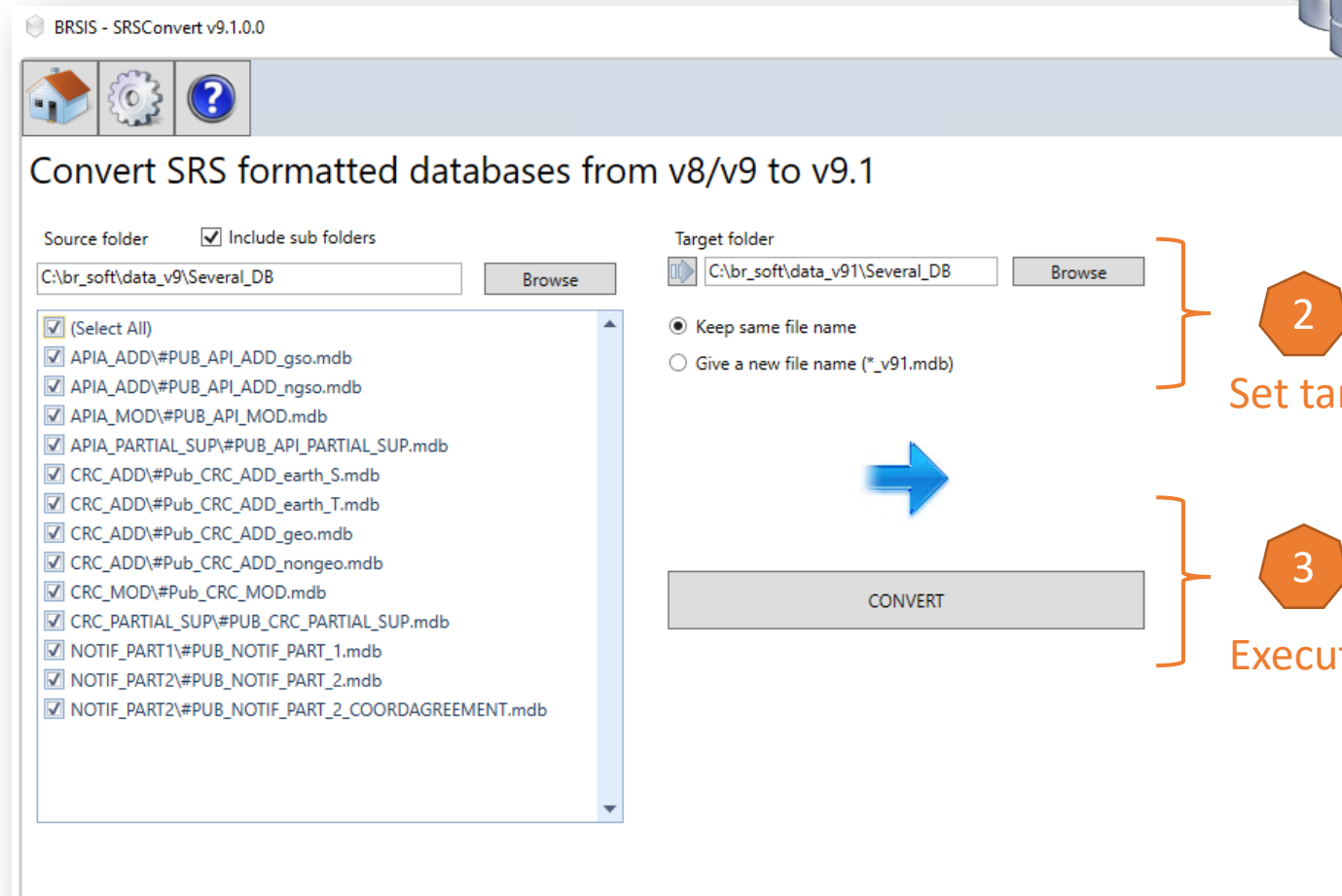
2

Set target folder

3

Execute

# SRS convert – several databases



1

Set source folder

2

Set target folder

3

Execute

# BRSIS-Validation

The screenshot displays the ITU Space Information System (SNS v9.1) interface. At the top, the ITU logo and the text "Space Information System (SNS v9.1)" are visible. The main content area is titled "Selected task: Validation" and contains a list of details for the Validation task, including its version (9.1.4), description, contact information, and validation rules. To the right of this list are two buttons: "SpaceQry" and "SRS convert". Below the task details is a section for the "Selected database", which currently shows "Microsoft Access" as the selected option. On the far right, there is a vertical sidebar with a "New Window" button at the top, followed by "Start" and "Quit" buttons. At the bottom of this sidebar, there is a status bar showing a green checkmark for the "Selected task", a red X for the "Selected database", and a user profile for "evangeli" with a settings gear icon.

**ITU Space Information System (SNS v9.1)**

**Selected task: Validation**

- **Version:** 9.1.4 ([what's new?](#))
- **Description:** Validate electronic submissions
- **Contact:** [brsas@itu.int](mailto:brsas@itu.int)
- **Validation Rules:** [Satellites](#) [Earth Stations](#) [Plans](#)

**Selected database:**

- Microsoft Access

✔ Selected task

✘ Selected database

evangeli

# Validation

BRSIS - Validation v9.1.6 - BETA

Notice Id.

*Sat. name: USASAT-61B*  
*Type of notice: Coordination*      *Status: 01*  
*Adm./Org.: USA*      *Orb. pos.: 100W*      *Station type: G*

Validation

**Graphical data cross validation**

GIMS Database (.mdb)

1  
Enter notice id.

2  
Enter GIMS db

3  
Validate

# Validation

BRSIS - Validation v9.1.6 - BETA

Notice Id. 119520139

Sat. name: USASAT-61B  
 Type of notice: Coordination Status: 01  
 Adm./Org. USA Orb. pos.: 100W Station type: G

Validation Reports

created on 29/09/2022 - start time: 16:50:33 - duration: 0min. 11sec. by user MORETS using version: 9.1.6.3  
 Validation options : ApiCheck:False, SRSFix:True, partial merge:False, brUser:False, gims:True

Validation: 7 Errors  
 SRSFIX: 13 Errors

SRSFIX RESULT: Warnings:13

Beam	E/R	Grp Id	Table	Field	Value	Row	Valerr	Rule	F/W	Ap4 Ref	Error Message
			com_el	st_cur	01		9367	1	W		CORRECTED: set notice status to 01
			geo	long_orig			9372	1	W		CORRECTED: geo.long_orig set to null
			notice	st_cur	01		9367	1	W		CORRECTED: set notice status to 01
			gpub	all		0	9369	1	W		CORRECTED: removed special sections that do not apply to a coordination notification (ntf_rsn is A or C and d_rcv > 01.01.2017)
n/a	-		ant_type	all			9359	1	W		CORRECTED: updated antenna type reference data
n/a	-		com_el	all			9316	1	W		CORRECTED: removed findings and BR Data
n/a	-		notice	all			9316	1	W		CORRECTED: removed findings and BR Data
n/a	-		pub_ssn	all		0	9316	1	W		CORRECTED: removed findings and BR Data
n/a	-		tr_aff_ntw	all			9316	1	W		CORRECTED: removed findings and BR Data
n/a	-		freq	<all>		0	9327	1	W		CORRECTED: freq table rebuilt for non-API, non-RS49
n/a	-		gpub	ssn_type		0	9343	1	W		CORRECTED: set Special Sections to 'NOTIF' (gpub.ssn_type set to 'N')
n/a	-		grp	all			9316	1	W		CORRECTED: removed findings and BR Data
n/a	-		provn	all			9316	1	W		CORRECTED: removed findings and BR Data



# Validation

BRSIS - Validation v9.1.6 - BETA

Notice Id. 119520139

Sat. name: USASAT-61B  
 Type of notice: Coordination Status: 01  
 Adm./Org. USA Orb. pos.: 100W Station type: G

Validation Reports

created on 29/09/2022 - start time: 16:50:33 - duration: 0min. 11sec. by user MORETS using version: 9.1.6.3  
 Validation options : ApiCheck:False, SRSFix:True, partial merge:False, brUser:False, gims:True

Validation: 7 Errors  
 SRSFIX: 13 Errors

VALIDATION RESULT: Fatal Errors:3 Warnings:4

Export Print Filter Search Summary

Drag a column header here to group by that column

Beam	E/R	Grp Id	Table	Field	Value	Row	Valerr	Rule	F/W	Ap4 Ref	Error Message
			geo	long_nom	-100		101	4	F	A.4.a.1	xGIMS: Orbital positions are different in the SNS and the GIMS mdb
			geo	tol_east			102	1	F	A.4.a.2.a	Value missing
			geo	tol_west			103	1	F	A.4.a.2.b	Value missing
CMD	R		s_beam	beam_name	CMD		501	4	W	B.1.a	xGIMS -If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute antenna gain value [Max.Gain(Item B.3.a) + Rel.Gain] is less than -10dBi, the subject antenna gain contour(s) is not required to be provided unless such a value is technically achievable.(CMD/R/CO (Gain Contours)/C) Possibly missing contours: -2 dB,-4 dB,-6 dB,-10 dB,-20 dB
CMD	R		s_beam	gain	89		504	2	W	B.3.a.1	Gain value is outside the recommended range
CMD	R		s_beam	pnt_acc	0.1		505	4	W	B.3.d	Value greater than calculated beamwidth (0.01)
TLM	E		s_beam	beam_name	TLM		501	4	W	B.1.a	xGIMS -If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute antenna gain value [Max.Gain(Item B.3.a) + Rel.Gain] is less than -10dBi, the subject antenna gain contour(s) is not required to be provided unless such a value is technically achievable.(TLM/E/CO (Gain Contours)/C) Possibly missing contours: -2 dB,-4 dB,-6 dB,-10 dB,-20 dB

# Thank you!

ITU – Radiocommunication Bureau

Questions to [brmail@itu.int](mailto:brmail@itu.int) or [brsas@itu.int](mailto:brsas@itu.int)

