

# Introduction to BR Space Software V7

Americas Regional  
Radiocommunication Seminar  
Asuncion, Paraguay  
8-12 July 2013

# Content

**from V6 to V7**

- BR Software and Version 7

**General  
Considerations**

- Setup, Installation, Update,  
Information

**Applications**

- Introduction to each application

**Future**

- Future of BR Space Software

# Applications

- PC based:

- SpaceQry
- SpaceCap
- SpaceVal
- SpacePub
- SpaceCom
- GIMS
- GIBC
- SPS
- Ap7Capture

- Web

- SNS-on-Line
- SNL-on-Line

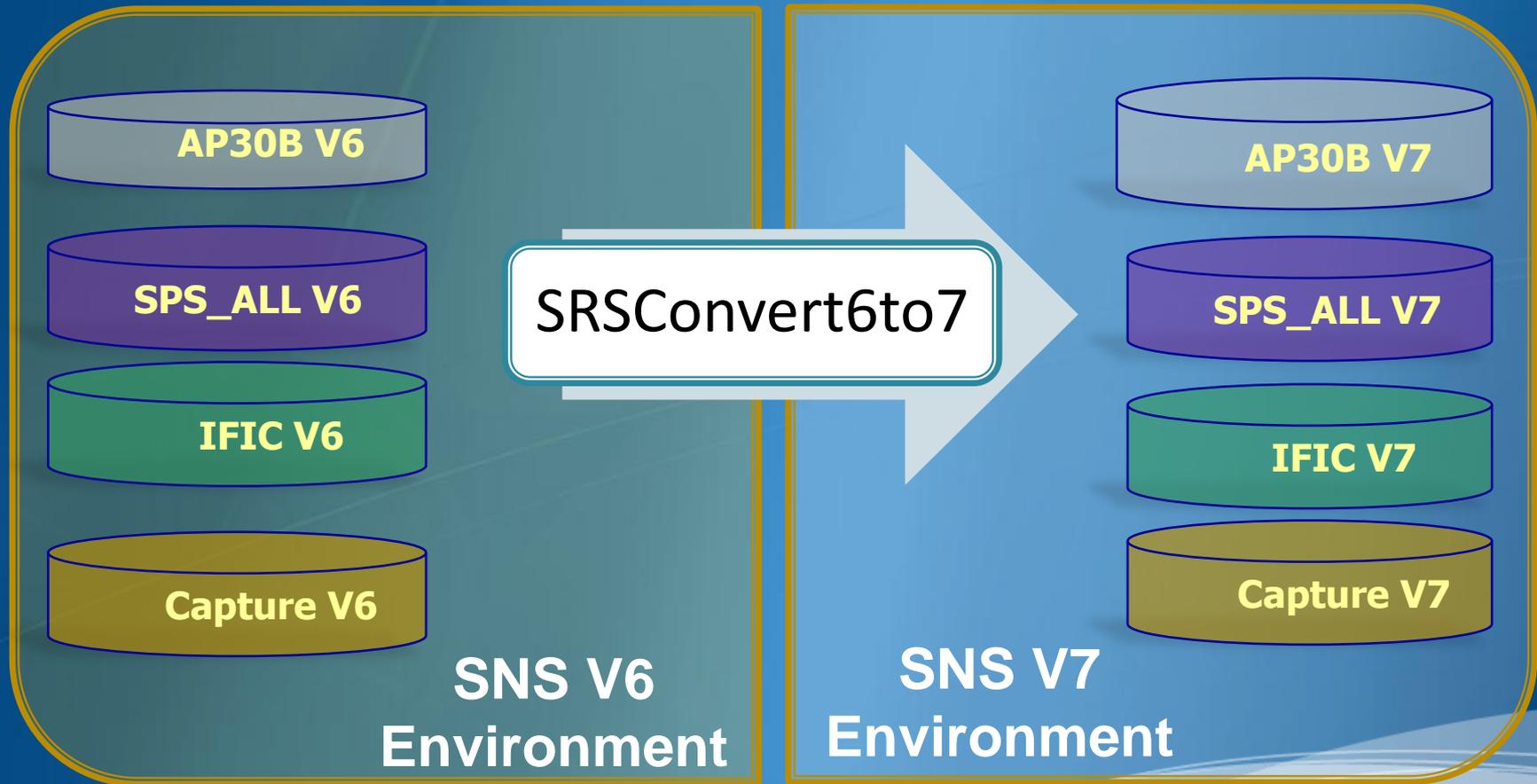
- Software Distribution

- BR IFIC DVD ROM
- Downloadable from ITU web site



# BR Software and SNS V7

## Conversion Tool from SNS V6 to V7



# SAM V7 – Space Applications Manager

ITU-BR Space Applications Manager v7.0.0 ...

★ Favorites

BR Soft

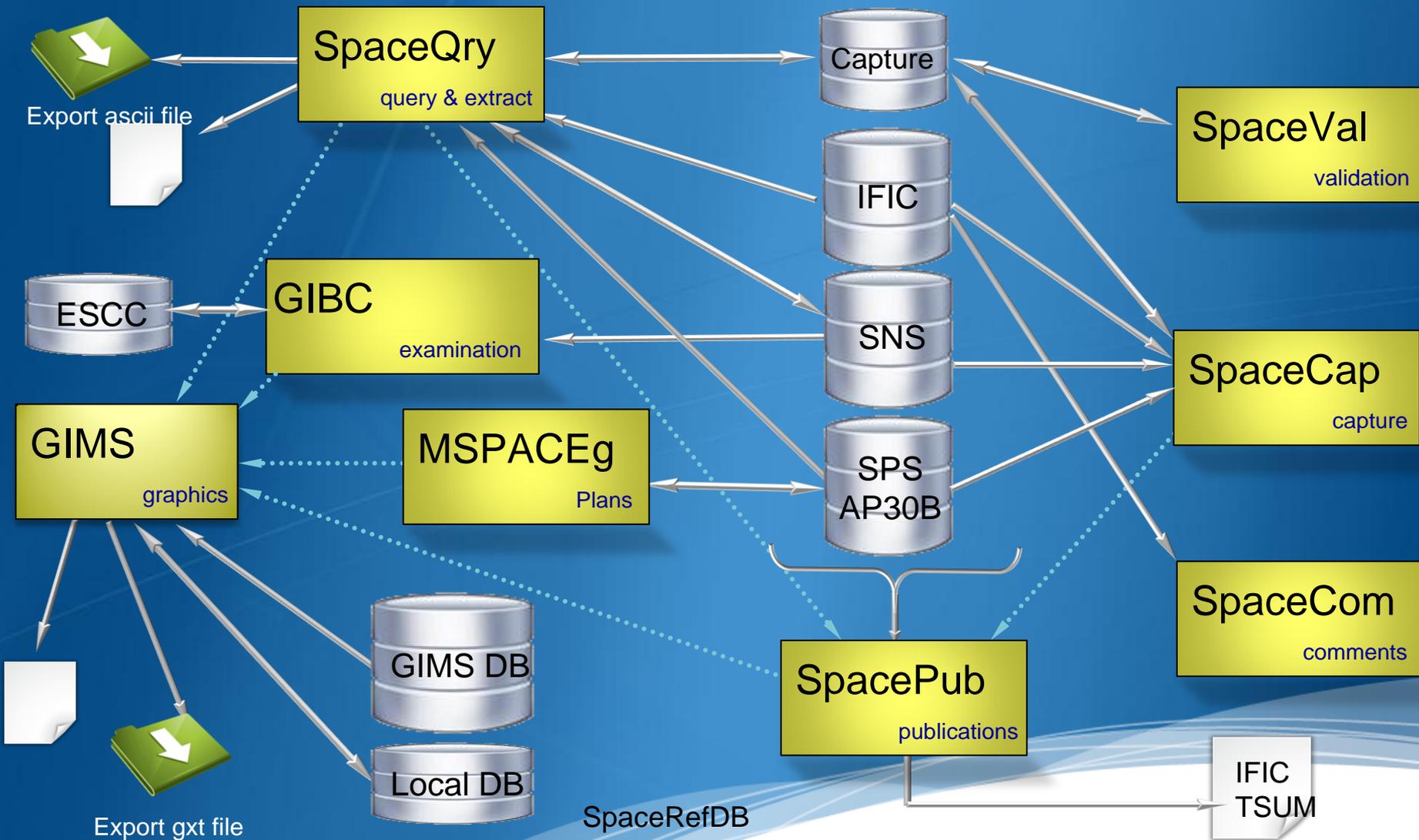
BR Web

 SpaceCap	 SpaceVal
 SpacePub	 SpaceQry
 GIMS	 SRSCConvert
 AP7Capture_v7	 GIBC
 IDwM	 SRSFiW7

 International Telecommunication Union  
Committed to connecting the world

09.02.2012 AM- Seminars and Workshops: List of Ra...

# Space Software and Databases



# SpaceCap

- Software for electronic capture of data elements to be furnished in notices relating to space stations
- SpaceCap includes interfaces to capture notice information for:
  - Satellites, EarthStations, Radiioastronomy, API, Res 49, Space Plans
- SpaceCap Wizards:
  - Groups, RS49, DBIU, Submit to ITU, Plan – Strapping
- Tools for:
  - Cost recovery, Groups correction
- SpaceVal integration and assisted error correction facility



# SpaceCom

- Capture system for comments on Special Sections.
- Designed to assist administrations and the Bureau in the management of the comments on four types of Special Sections:
  - CR/C different forms of coordination, now also 9.41
  - API/A
  - AP30/E, AP30A/E AP30-30A/E Part A
  - AP30-30A/F/C



# SpaceQry

- The Space Query and Extract System
  - Accesses and queries all BR formatted Space Databases
  - Produces extracts based on the results of the queries
- Other characteristics
  - Full access to graphical data through GIMS
  - Link to Space publications software



# SpacePub

- Software for publications of satellite networks/earth stations from a SRS formatted database.
- Produces an RTF, printable document
- Following forms of notice:
  - Satellite and earth stations;
  - Radioastronomy stations;
  - Advance publication;
  - RS49 notice form relating to the administrative due diligence procedure;
  - AP30, AP30A, AP30-30A, AP30B, ART2A notice forms for the Plan.
- Publications in 6 languages



# SpaceVal

- Software for Validation
  - Completeness of the forms
  - Correctness
- Operation modes
  - Standalone application– Full validation
  - Integrated in Spacecap (Interactive mode) to validate while capturing data
- Validation Rules for Satellite, Earth Stations and Plan networks
- Crossvalidation with GIMS



# GIMS

- Graphical Interference Management System
  - GIMS databases management
  - View, capture and modification of graphical data
  - GXT format management
  - PFD, Gain interpolation tools
- Types of diagrams:
  - Antenna Gain
  - Service area
  - AG/GSO
- Now including also non-GSO, in the forms of images, only for perusal



# GIBC

- Technical examinationx to determine coordination requirements on satellite networks.
- Satellite networks, based in criteria:
  - PFD
  - Appendix 8 Noise temperature and Application of the coordination arc.
  - Appendix 30B C/I
- Earth Stations:
  - Appendix 7 coordination area



# SPS

SPS – Software for the determination of the coordination requirements for the Plans for space networks in Appendices 30 and 30A

- Consists of 3 major components:
  - MSPACEg software for compatibility analyses
  - SPS reporting tool
  - Utility to update reference situation of BSS Plans/Lists.



# SNS-ON-LINE

- Gives access to the Space Networks Systems Database
- Query system (General or Special queries)
- Help, FAQ and news
- Retrieval, download information
- Submission utilities
- Grafics (GIMS and ESCC)
- TIES Registered users



# Snl (Space Network List)

- Basic information concerning planned or existing space stations, earth stations and radio astronomy stations
  - **SNL Part A:** Use of the frequency spectrum, the occupancy of the geostationary orbit and non-geostationary orbit
  - **SNL Part B:** all reference publications (special sections and PARTs) related to the space services
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  - **SNL Part C:** information on pending networks - received but not yet published by the Bureau



# Web site

## Space networks and related software

YOU ARE HERE HOME > ITU-R > SOFTWARE

SHARE    

AP7Capture

GIBC

GIMS

SAM

SpaceCap

SpaceCom

SpacePub

SpaceQry

SpaceRefdb

SpaceVal

SPS (MSPACEg)

SRS

SRSCovert

SRSFixDB

SAM

### Space networks and related software

**AP7Capture - Capture system for AP7 Input parameters**  
Software package which allows the capture and modification of data that is relevant to the AP7 Analysis.

**Electronic submission of graphical Data**  
Description of the format for electronic submission of graphical data related to satellite networks.

**GIBC - Graphical Interface for Batch Calculations**  
Software package which provides the user with the ability to carry out calculations on satellite networks which allow determining the coordination requirements.

**GIMS - Graphical Interference Management**  
Software package which allows the capture and modification of graphical data relating to the electronic notification of satellite networks.

**SAM - Space Applications Manager**  
This software provides the user with a unique tool to easily run all installed BR Space Applications software from a global, menu-driven list, rather than searching for and starting applications individually.

**SNL – Space Network List**  
The SNL is a group of 20 lists of data concerning planned or existing space stations and earth stations giving information on the use of the frequency spectrum, the occupancy of the geostationary orbit, as well as on non-geostationary orbits.

**SpacePub – Space Publication**  
Software package for printing satellite networks / Earth stations from the SRS database.

**SpaceQry – Space Query and Extract System**  
Software package which provides access to the Radiocommunication Bureau's Space Radiocommunication Stations database.

**SpaceRefdb – Space Reference Tables**  
Software to install an up-to-date copy of the BR Reference tables.

**SpaceVal – Space Filings Validation Software**  
Software for validating electronic notices captured by the BR SpaceCap software; provides interactive validation facility in SpaceCap.

**SPS – Space Plans System (MSPACEg)**  
The SPS computer system has been developed to allow determination of the coordination requirements for the Plans for space networks in Appendices 30 and 30A of the Radio Regulations.

**SRS – Space Radiocommunications Stations on DVD-ROM**  
As of January 2012, the Space Radiocommunications Stations (SRS) on DVD-ROM is replaced by the BR International Frequency Information Circular (BR IFIC) - Space Service. For more information please refer to BR IFIC Space Service.



# Space Software Future

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WRC 12 Instructs the BR to implement a secure paperless electronic approach

Administrations to submit APIs subject to Coordination under Section II of Article 9 to the BR

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Electronic correspondence between administrations and the BR

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Electronic correspondence between administrations

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Radio Communications Advisory Group advises the BR to

Implement a common application framework

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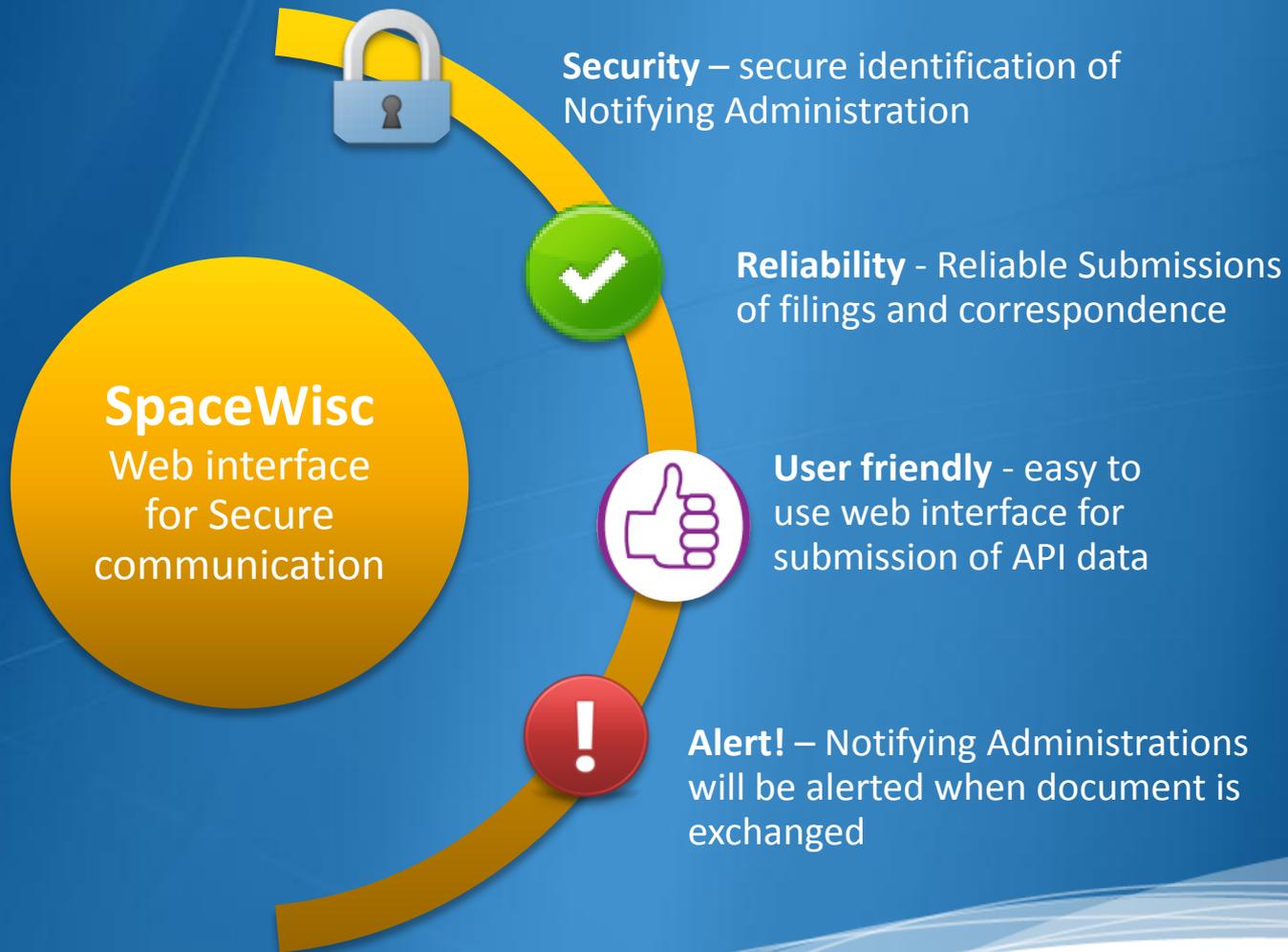
Have a centralized database for Space data

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Desarrollo de Busines continuity plan

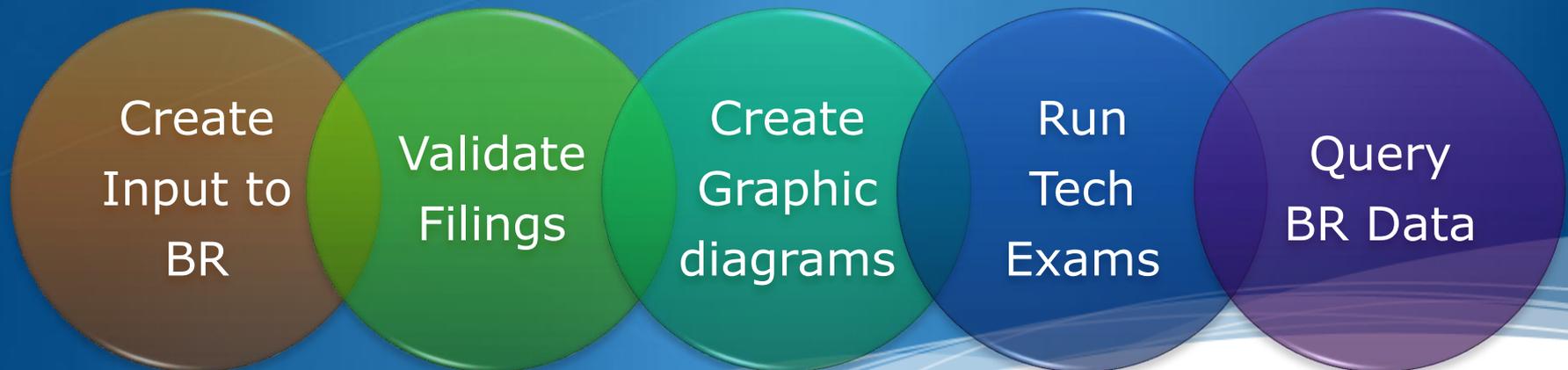
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# Futuro Software Servicios Espaciales



# Conclusions

- Use of Space BR: SpaceCap, SpaceVal, SpaceQry, SpacePub, SpaceCom, SNS-on-Line, SNL
- GIMS for Graphical data
- Ensure consistency and integrity of data
- Important to use the validation software
- Updated information and current versions in BR IFIC and ITU web site



# Contact Information

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