



# *SEDRIS XML Encoding*

**ISO/IEC JTC 1/SC 24 Plenary & WG Meetings  
(Online meeting)**

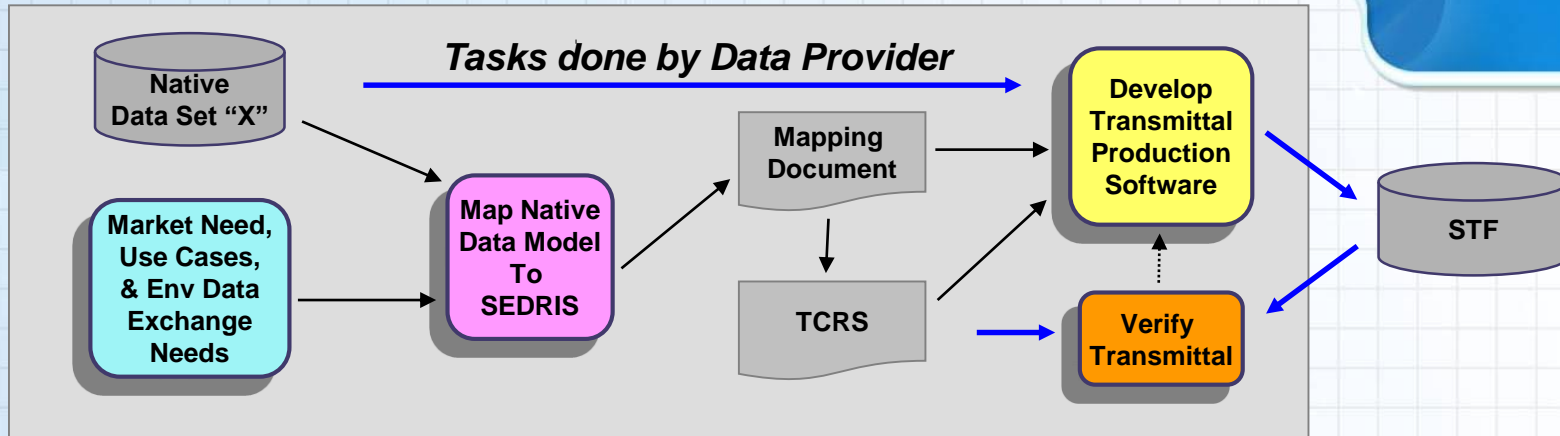
**July 27 – August 17, 2020, UTC**

**Myeong Won Lee (U. of Suwon)**

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# STF Development Steps



**Step 1: Native Requirements & Data Analysis: Define use or application plus data exchange requirements**

**Step 2: Develop Mapping Document: Use DRM, EDCS and SRM**

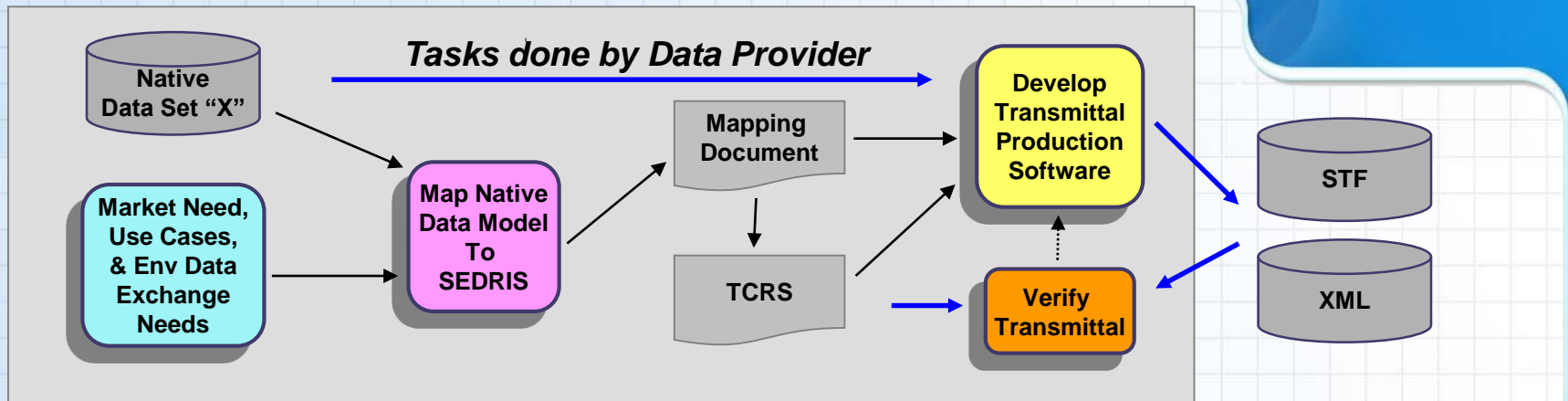
**Step 3: Develop Validation Criteria -- TCRS**

**Step 4: Develop Production software: Add in API and STF**

**Step 5: Validate Transmittal: Add in tools and applications**

- 🔗 **STF development steps are easier to follow than early development steps.**
  - ☑ **Engineer want to find integrated examples with fragmentary examples**
- 🔗 **Commercial approach usually use partial functions instead of SEDRIS full functions**
  - ☑ **Engineer want to specialize particular function for their technical area**

# SEDRIS XML Encoding



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**Step 2: Develop Mapping Document: Use DRM, EDCS and SRM**

**Step 3: Develop Validation Criteria -- TCRS**

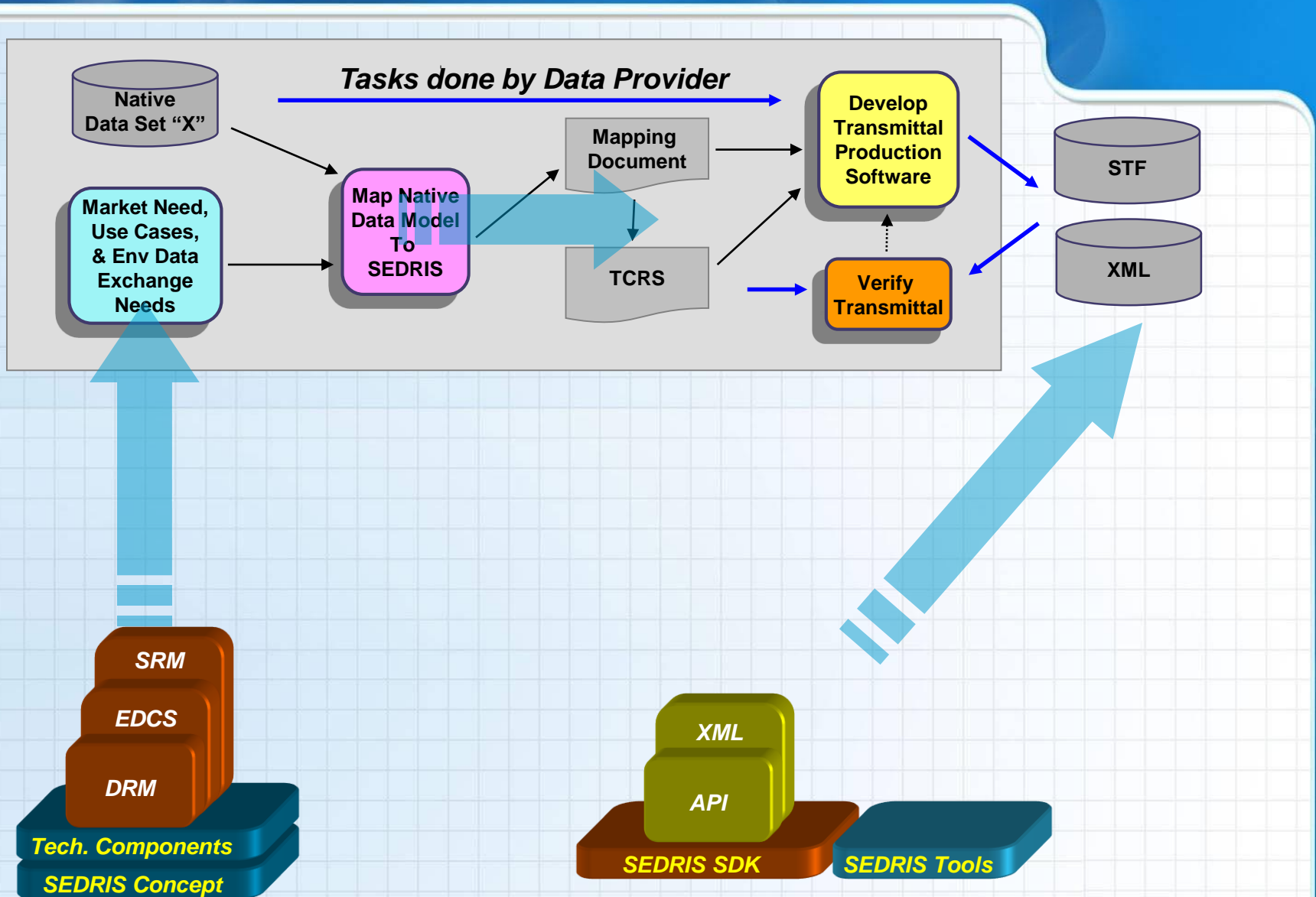
**Step 4: Develop Production software: Add in API and STF**

**Step 5: Validate Transmittal: Add in tools and applications**

**Step 6: SEDRIS XML data**

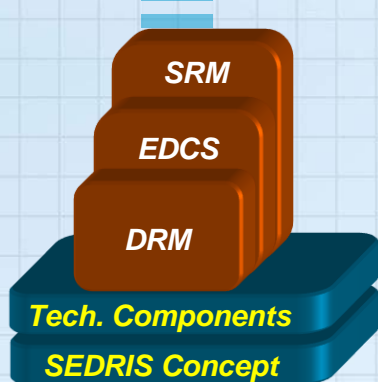
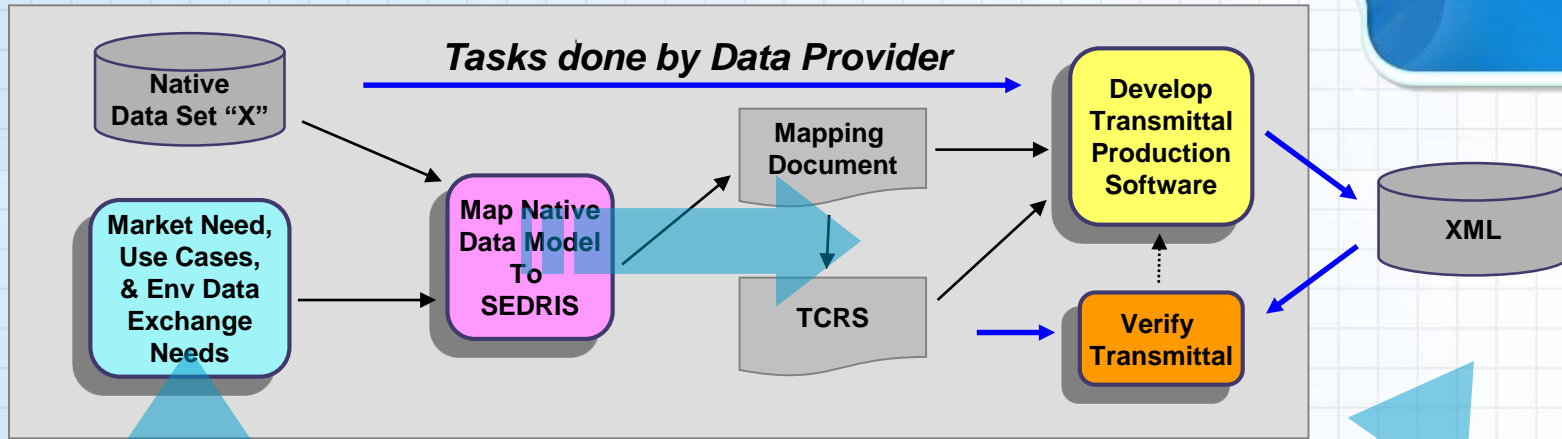
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# SEDRIS Components and STF





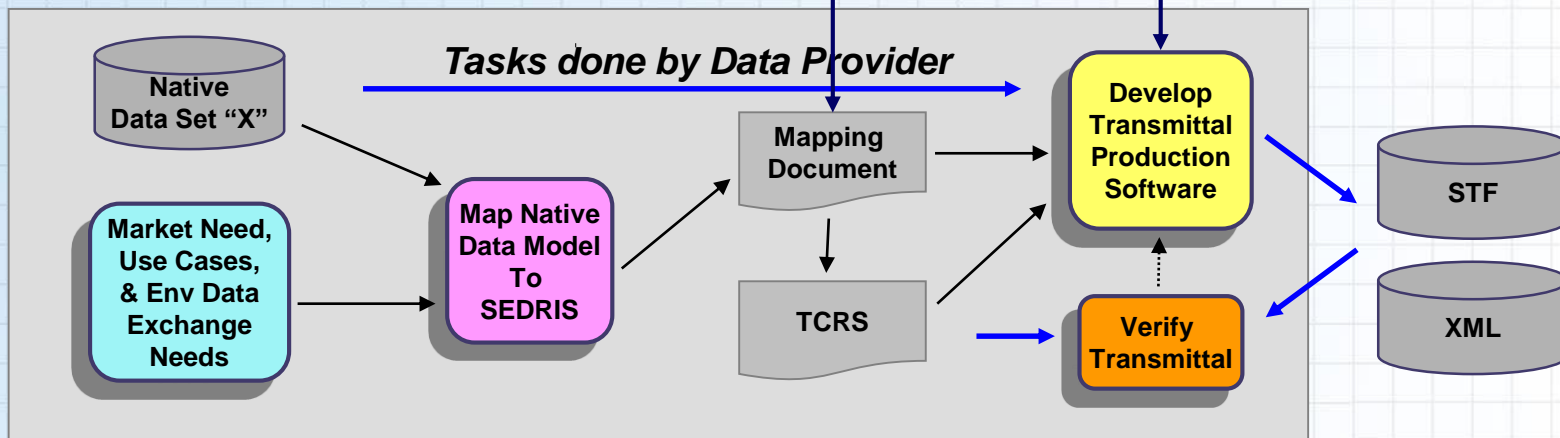
# SEDRIS Language Binding



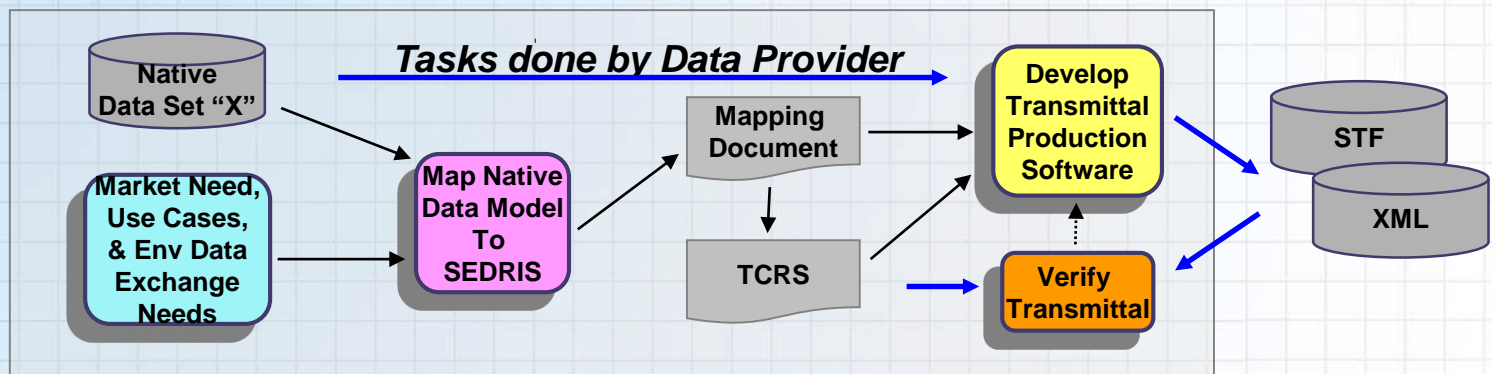
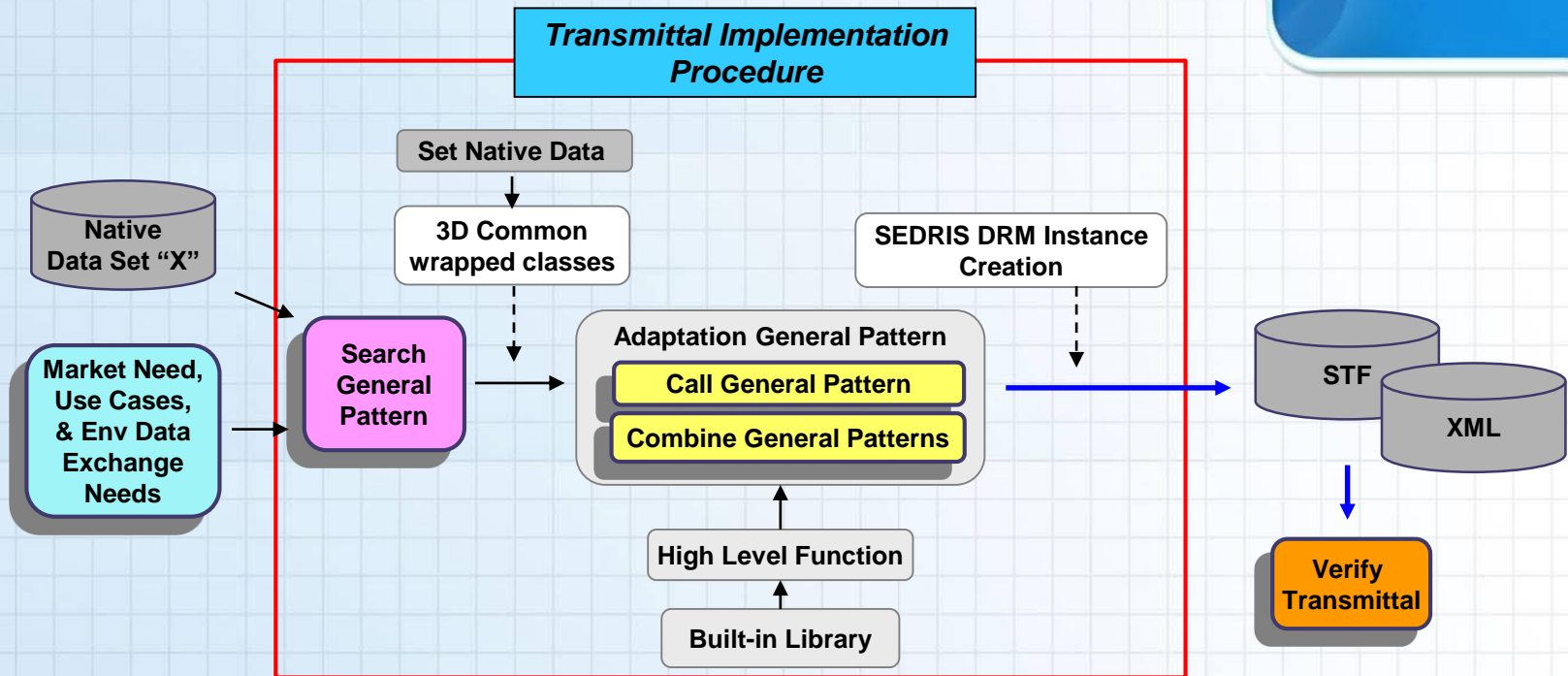
# The Current Working Step

## Current Working Process

1. Market Need
2. Mapping Document
  - List native data elements
  - Categorize (primitive data, organizing elements, description, modifier)
  - Learn SEDRIS DRM Diagram
  - Learn SEDRIS components (DRM, SRM, EDCS)
3. Search DRM Classes in DRM Diagram or Manual
4. Extract and Relate DRM Classes
5. Learn SEDRIS API
6. Develop Transmittal Production Software
7. Create Transmittal
8. Verify Transmittal

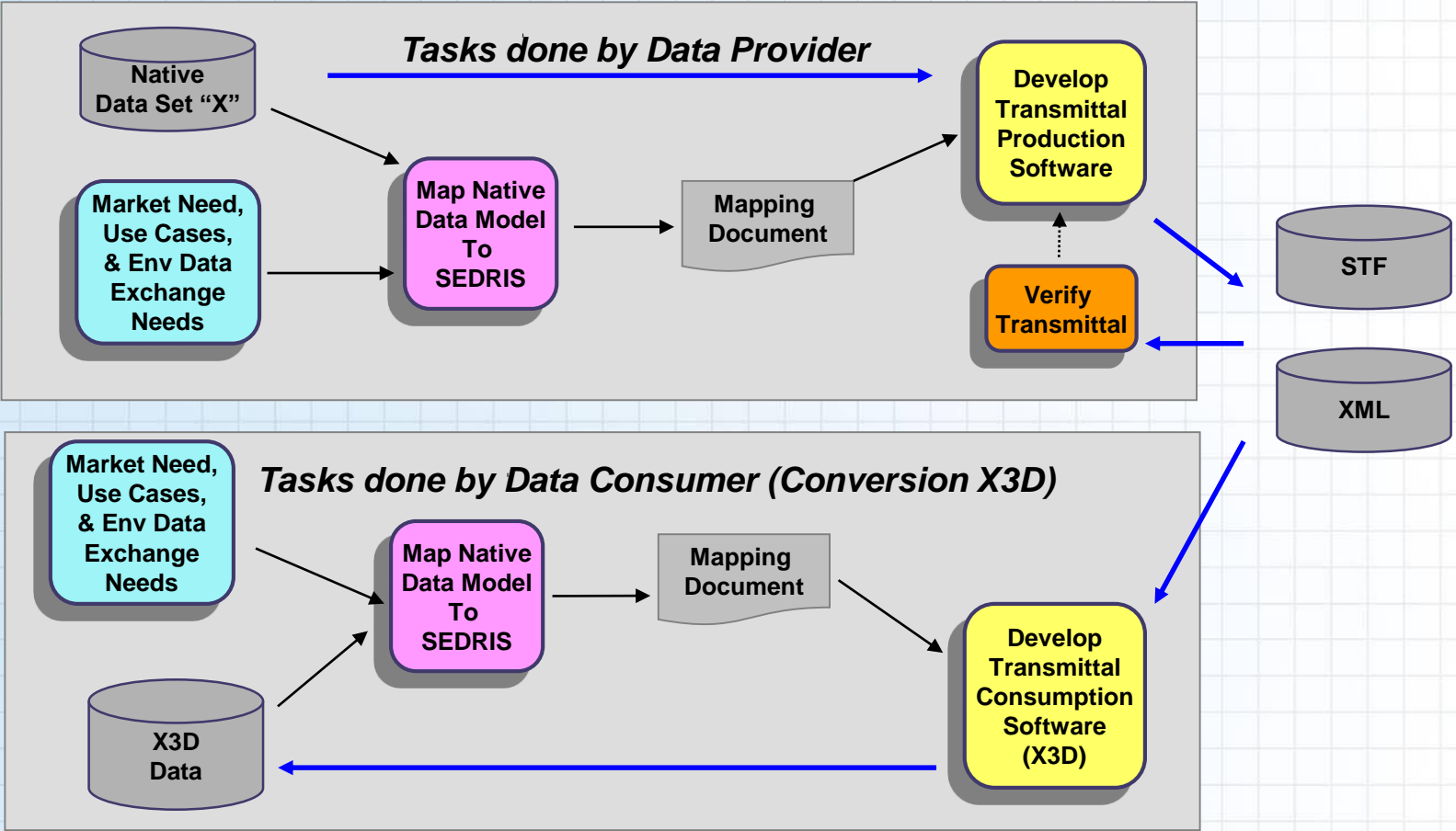


# The Working Step with Mapping Method

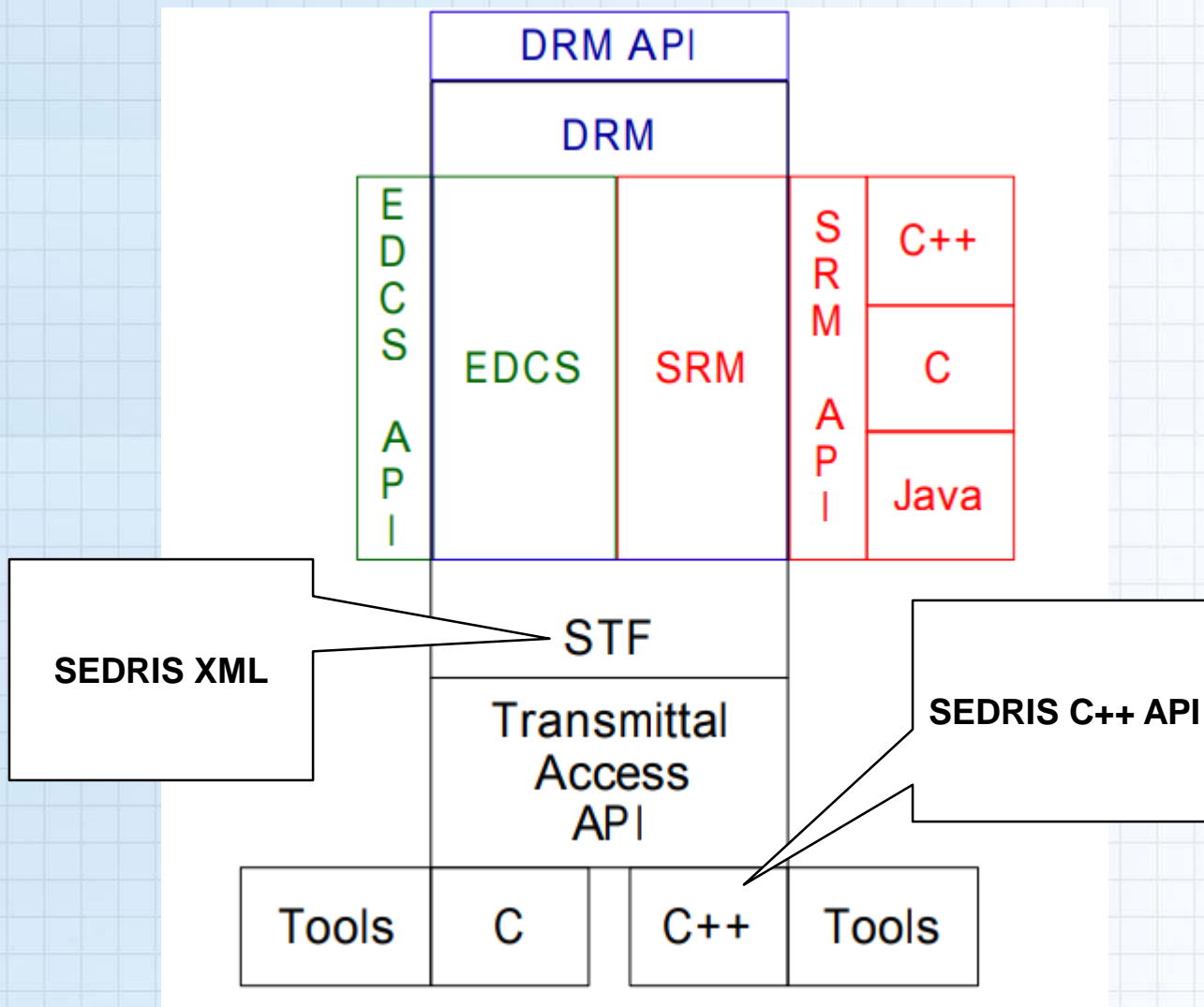




# The SEDRIS Production and Consumption Process (X3D)



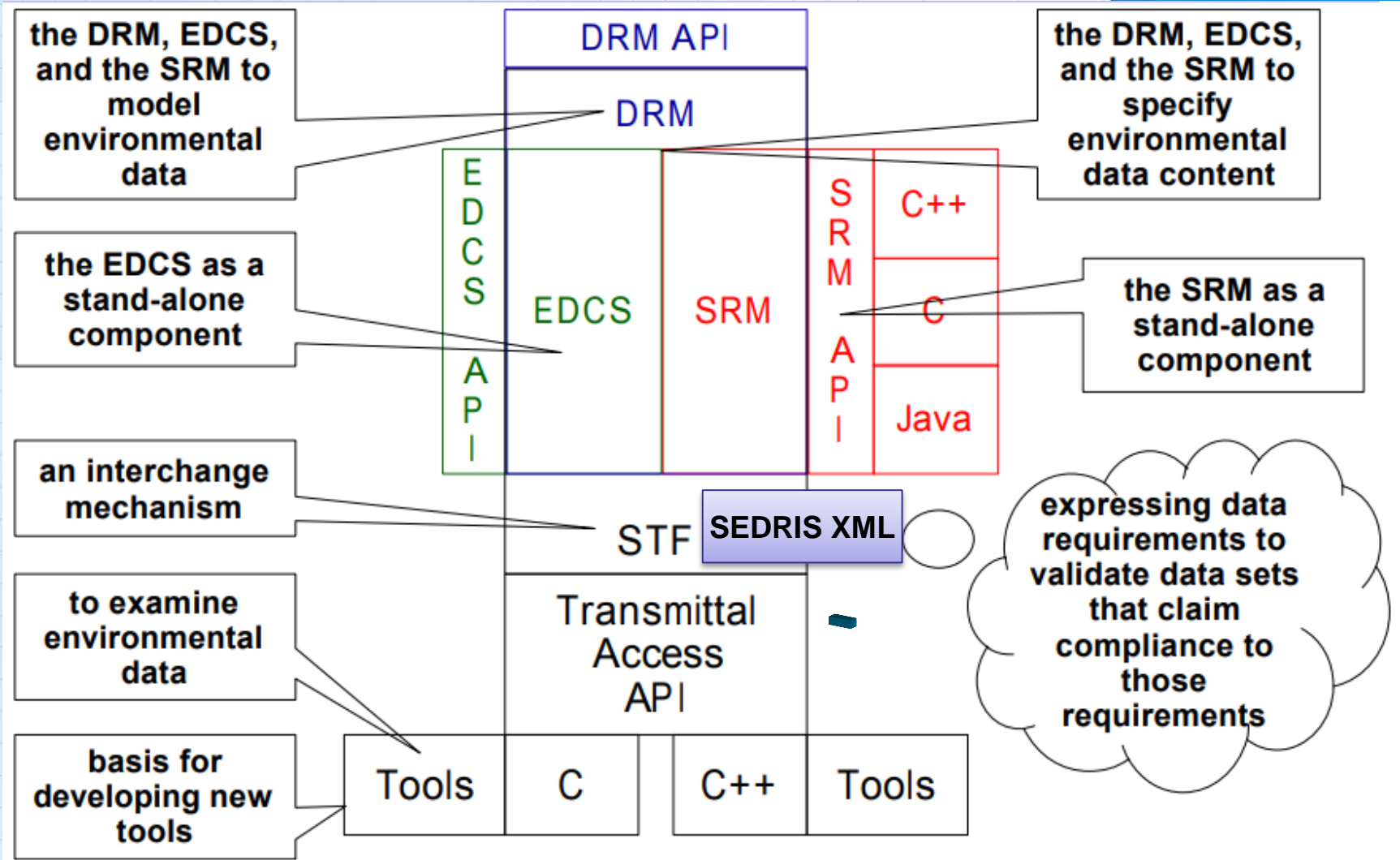
# SEDRIS Components



## Using the SEDRIS Componets

- **The SEDRIS API is an encapsulation of functionality which provides applications the ability to access DRM objects.**
- **The SEDRIS API is Transmittal Access API, DRM API, SRM API, EDCS API**
- **The Transmittal Access API implementation relies on the DRM, SRM, and EDCS APIs**
- **The Transmittal Access API deals with transmittals and objects within those transmittal**
- **Every object has a unique string within a transmittal, referred to as the “object id”**

# Using the SEDRIS Componets



# Conclusions

- **SEDRIS XML Encoding**
  - **SEDRIS UML and XML schema**
  - **XML definition and expansion using SEDRIS examples**
    - **test.stf**
    - **chair.stf**
- **SEDRIS viewer development for SEDRIS XML encoding**