

Ministry of Forests and Range



# **Understanding Key Applications: The “Big Picture” of application inter-connections**

*Sponsored by the  
Information Management Group*

*Version 6.1, March 2008*

*Original Version - Summer 2004*

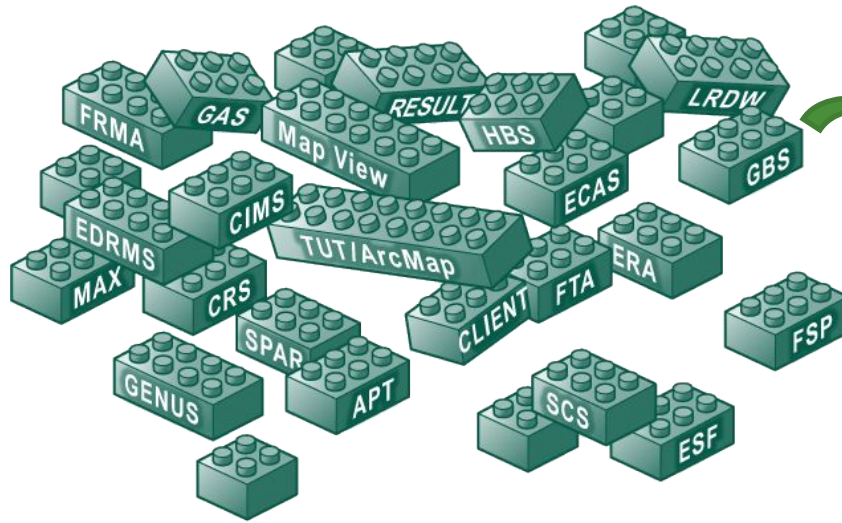


## Goal & Objectives

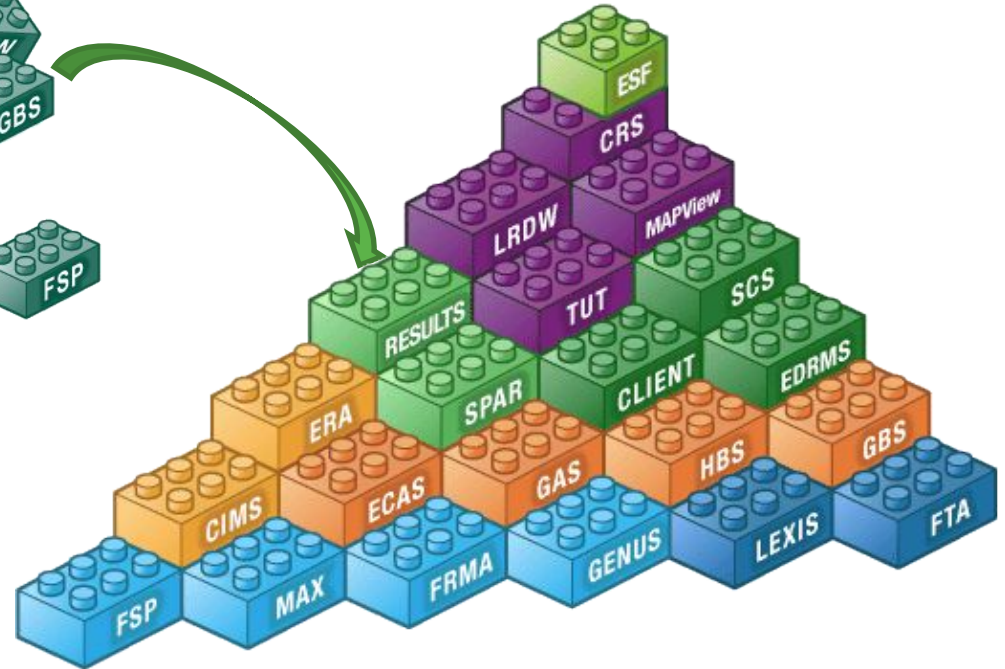
- Increase awareness of applications which support key MoFR business processes
- For each application, you will learn:
  - Basic business process
  - Linkages
    - How the same data is shared & accessed among multiple applications
  - Target user groups
  - Critical data elements within database tables
  - Key data dependencies between applications

**Note: application = computer system  
(e.g. FTA, RESULTS, SPAR, etc.)**

# Understanding the Applications

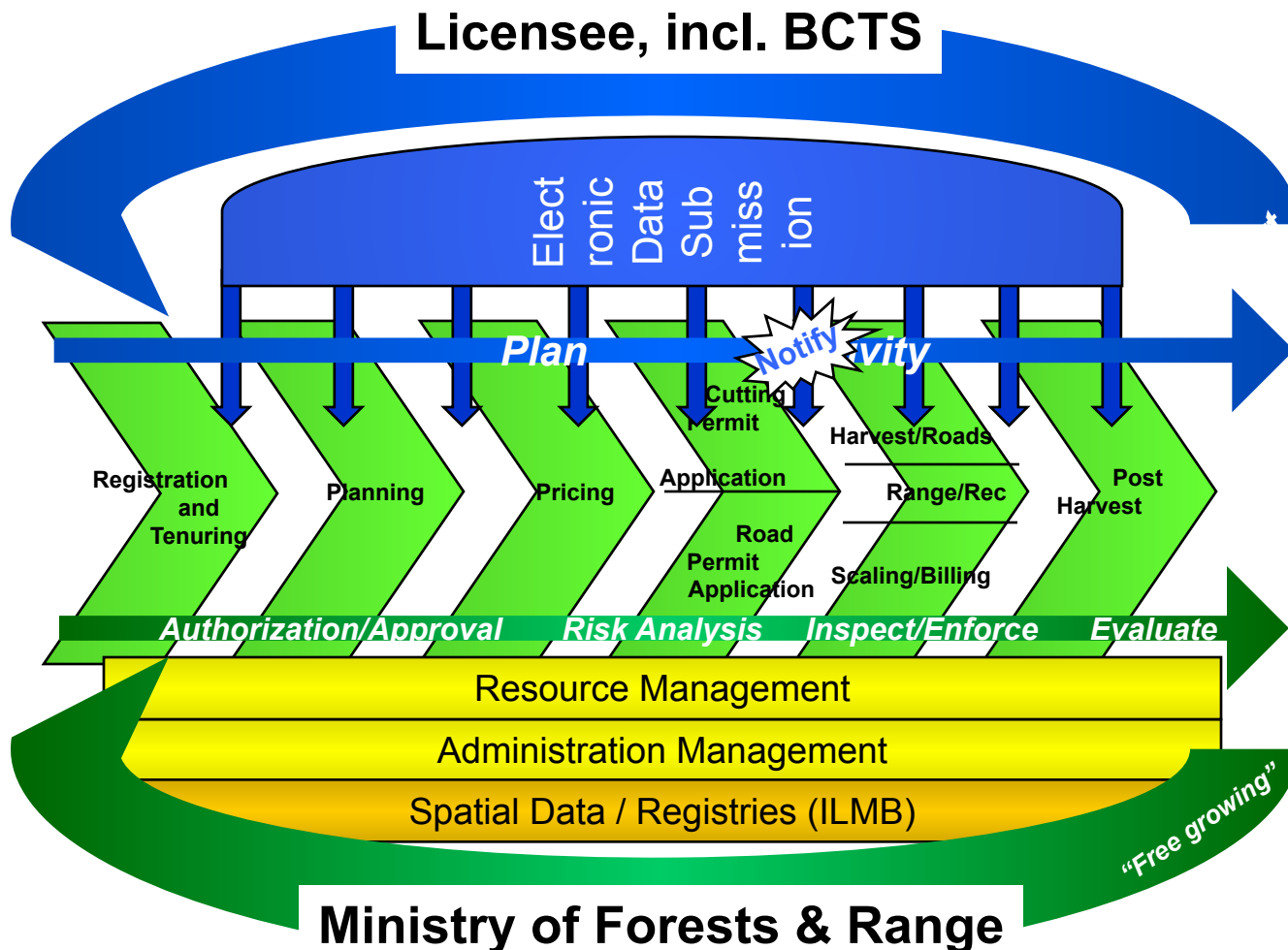


**Confused about how the applications fit together?**



**This presentation will help you understand how key applications are the building blocks for the Ministry of Forests and Range's business!**

# Planning to Free-Growing



# Understanding the Applications' Grouping

## Planning Applications

APT      MAX  
 FRMA    FSP  
 BCAS

## Administration Applications

CLIENT EDRMS  
 SCS  
 BCTS Admin

## Pricing and Billing Applications

ECAS      GAS  
 GBS      HBS  
 WASTE

## Other Applications

(non-integrated and/or non-ministry)

FNIRS  
 EMS  
 CRM  
 CAS  
 FCS  
 ARM  
 CHIPS  
 CONSEP  
 L-TRACK  
 EXCOR

## Resource Monitoring Applications

CIMS      ERA  
 FREP      IAPP

## Resource Management Applications

LEXIS    FTA  
 GENUS   VRIMS

## Spatial Applications

OSDB  
 LRDW  
 ILRR  
 SeedMap  
 TUT/ArcMap

## Data Broker

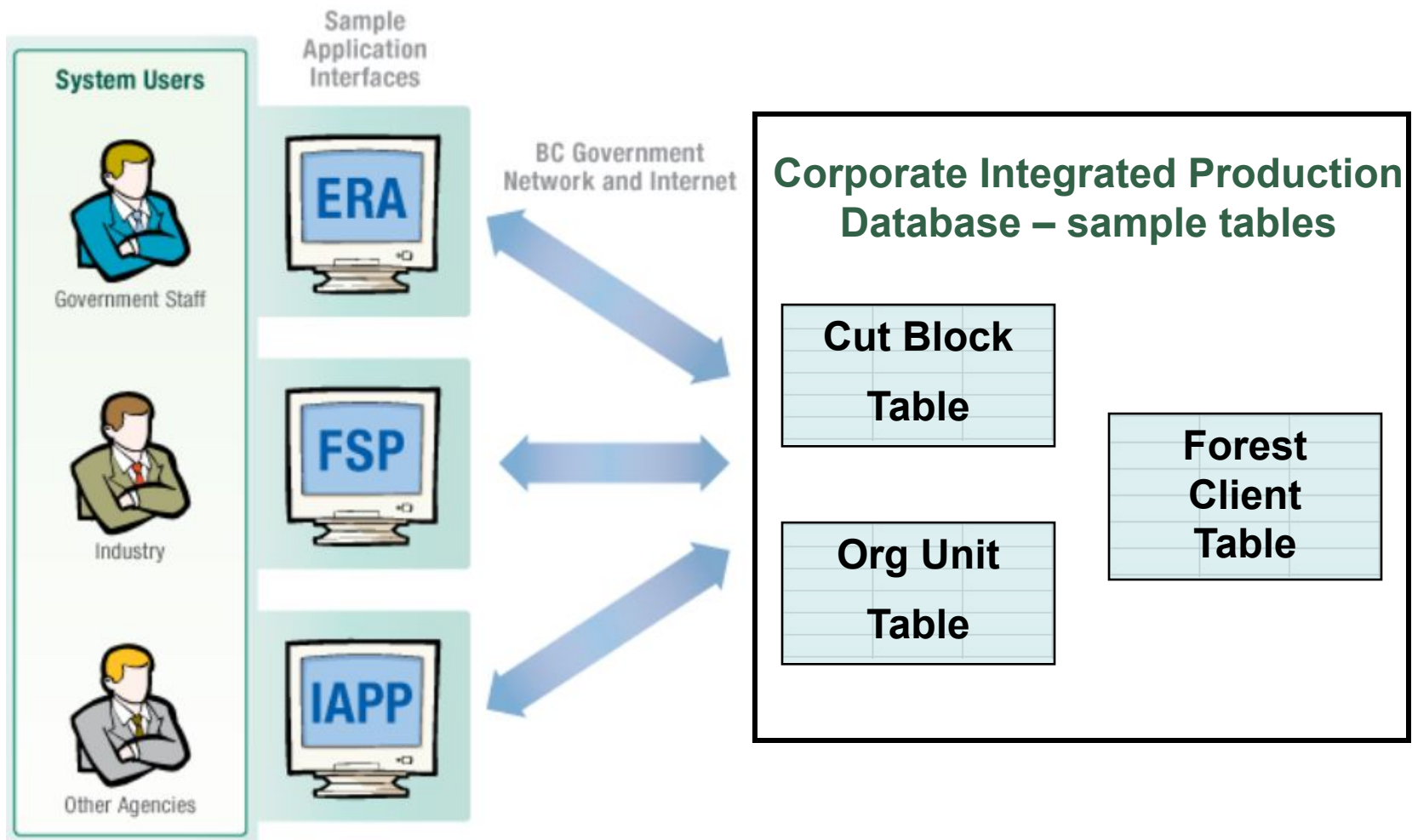
ESFCRS

## Forest Regeneration Applications

RESULTS SPAR  
 NSA

Note: Grouping is for the purposes of this presentation only

# Data Storage



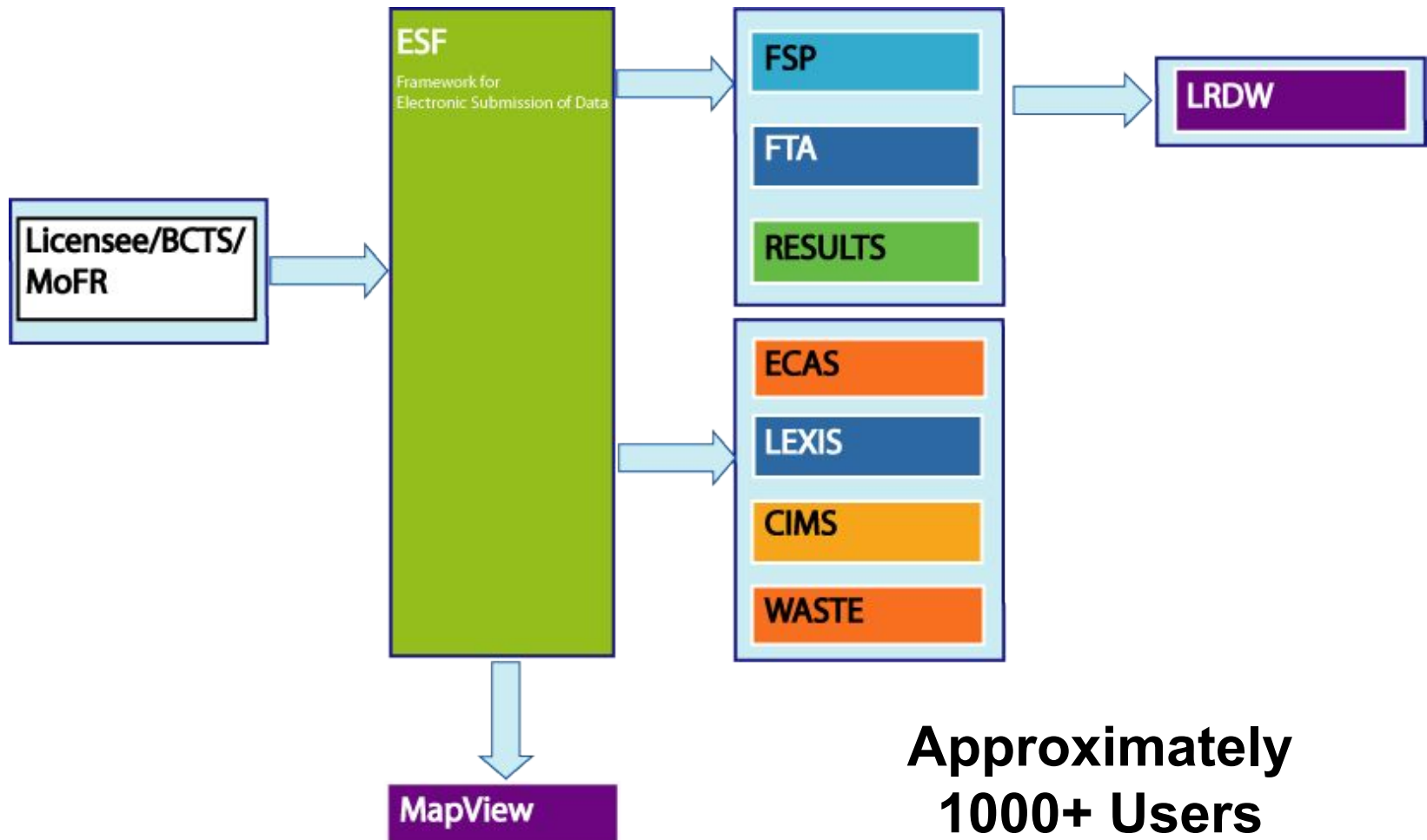
## Understanding Critical Data Elements

- What are critical data elements?
  - Pieces of information that you **must** enter, update, & maintain correctly and in a timely manner
- Why are critical data elements important?
  - They affect other applications
  - Critical for improved, accurate, & reliable business decisions
  - Imperative for government to meet legal requirements
- If you are working on a new or existing application, explore and research other existing applications
- *What is a common critical data element shared between many ministry applications?*



# Electronic Submission Framework (ESF)

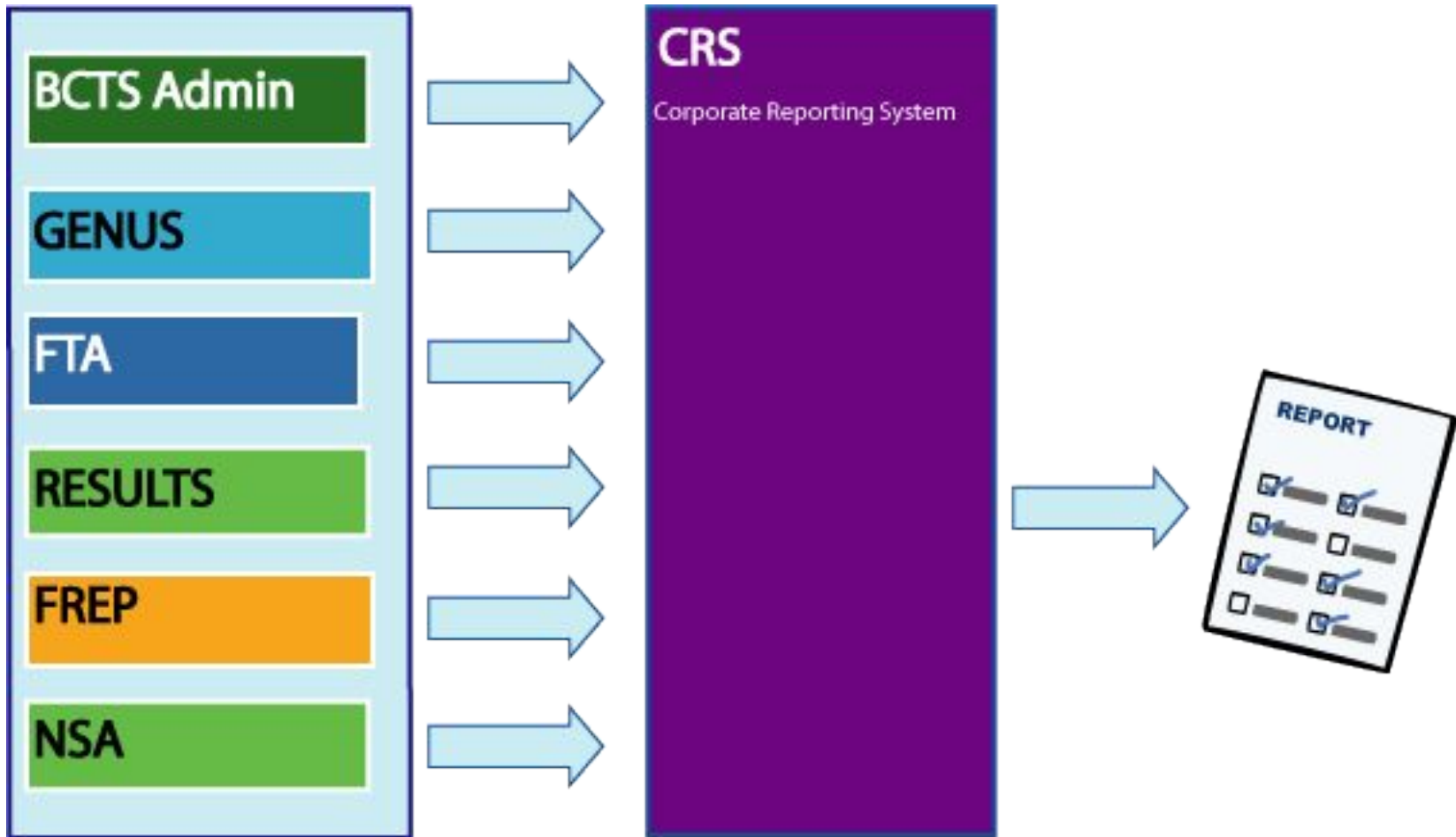
Data Broker





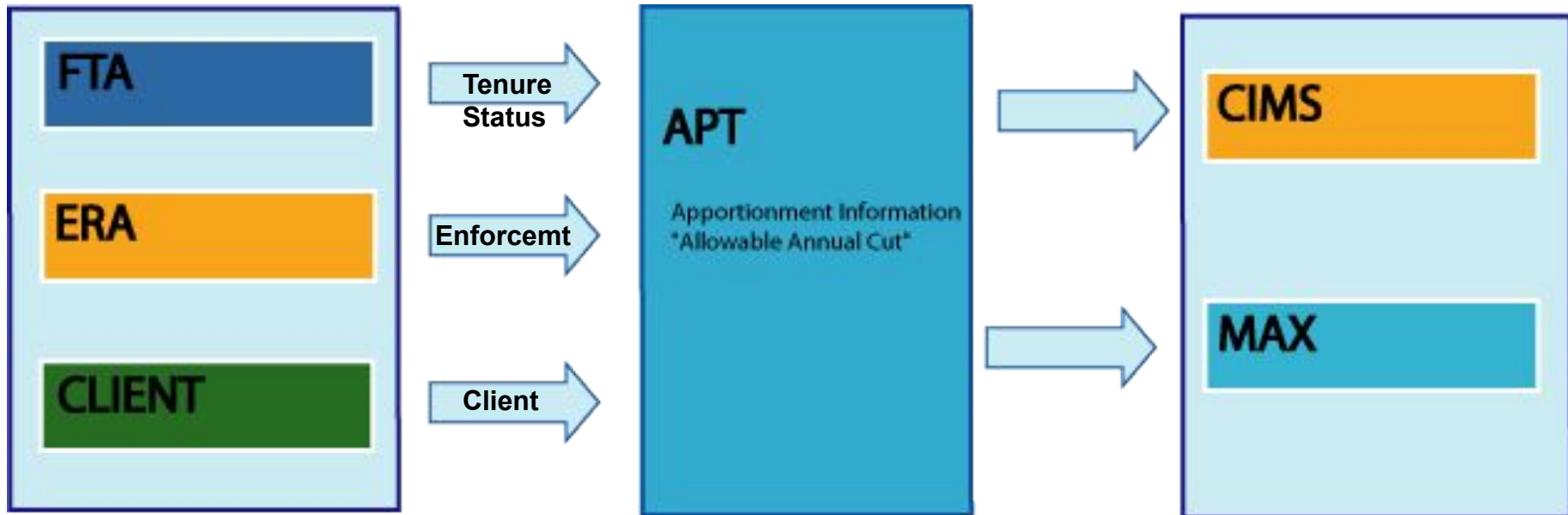
# Corporate Reporting System (CRS)

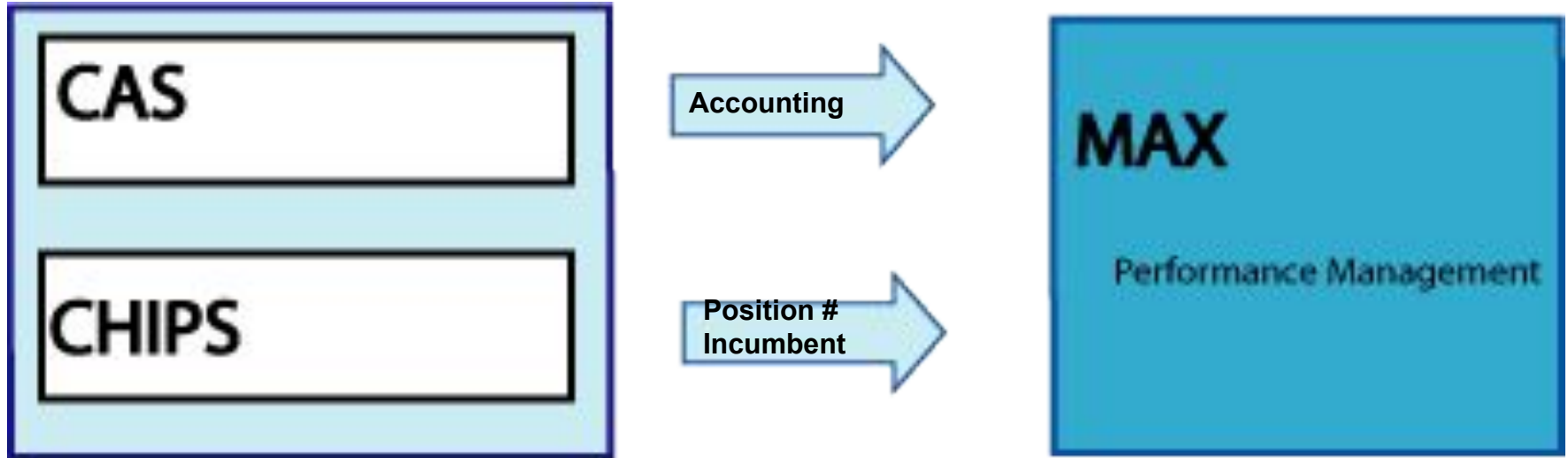
Data Broker



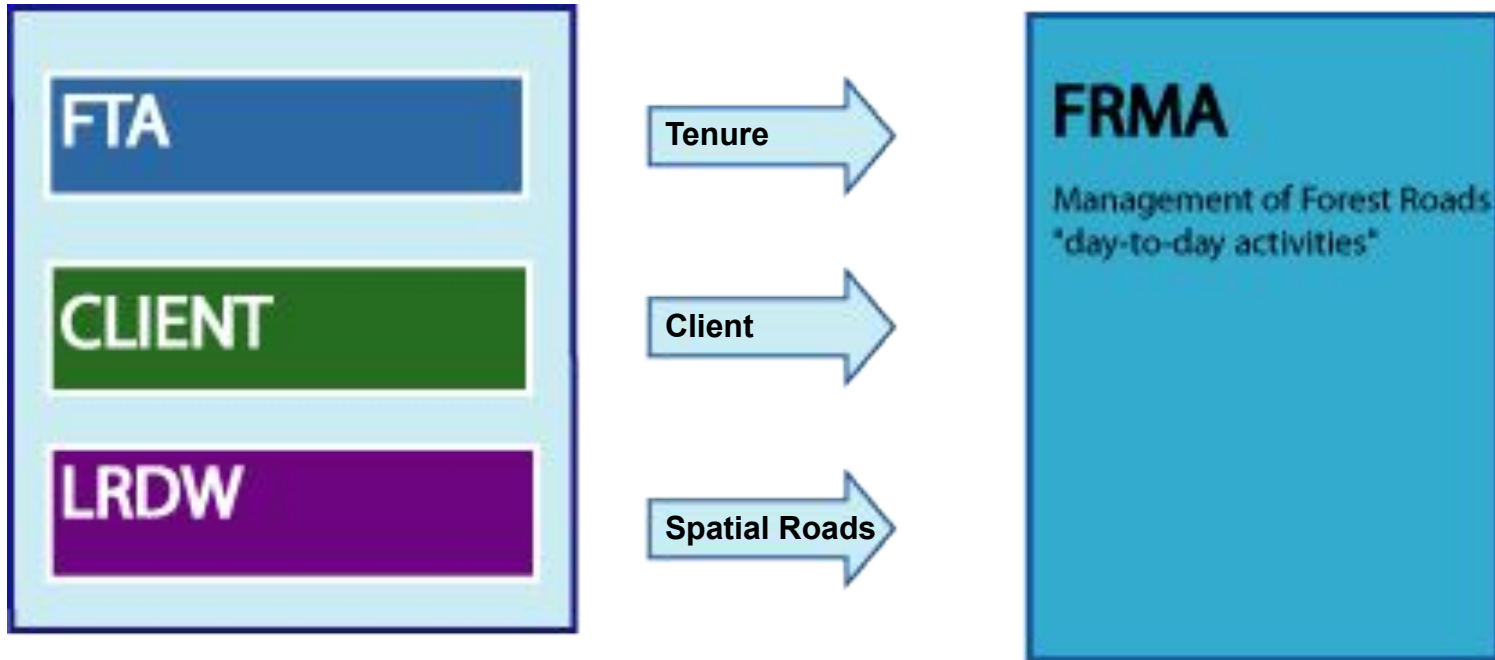
- Planning Applications include:
  - Apportionment System (APT)
  - MAX Performance Management Application (MAX)
  - Forest Roads Management Application (FRMA)
  - Forest Stewardship Plan Tracking System (FSP)
  - BC Timber Sales Cost Accounting System (BCAS)

# Apportionment Application (APT)

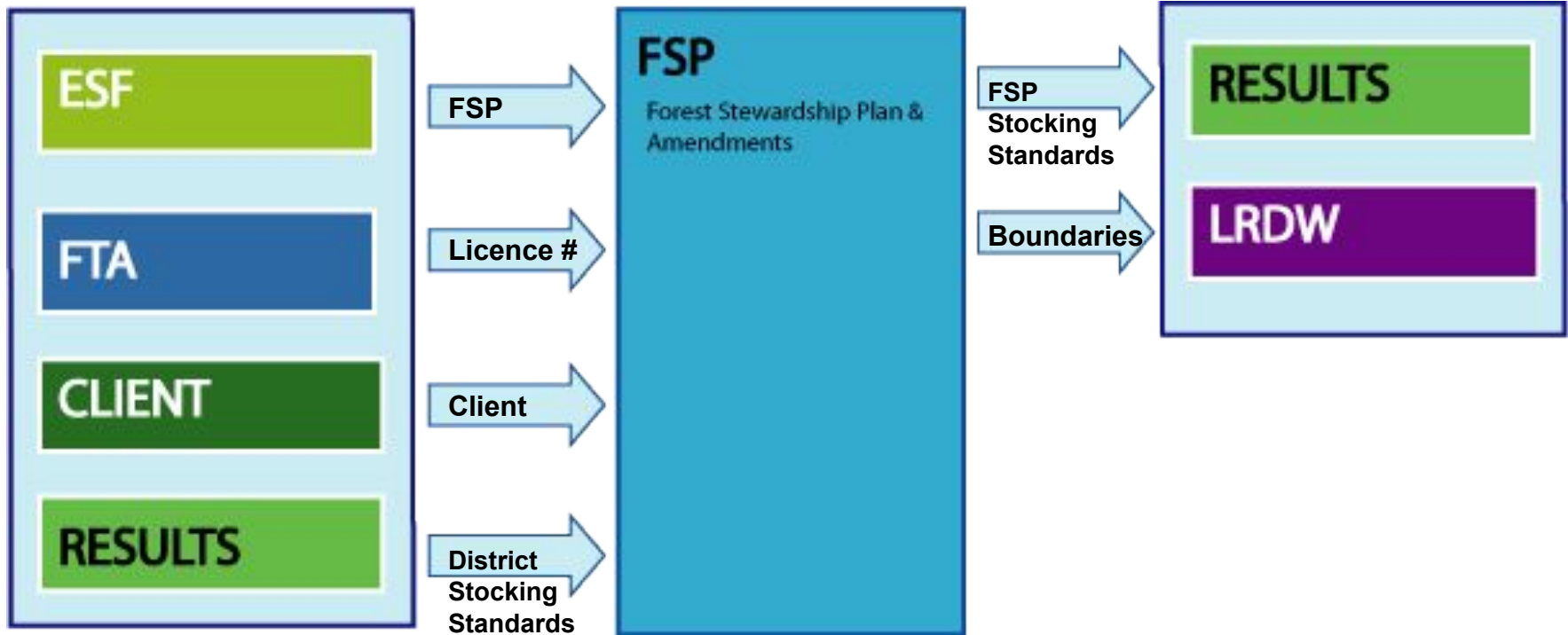




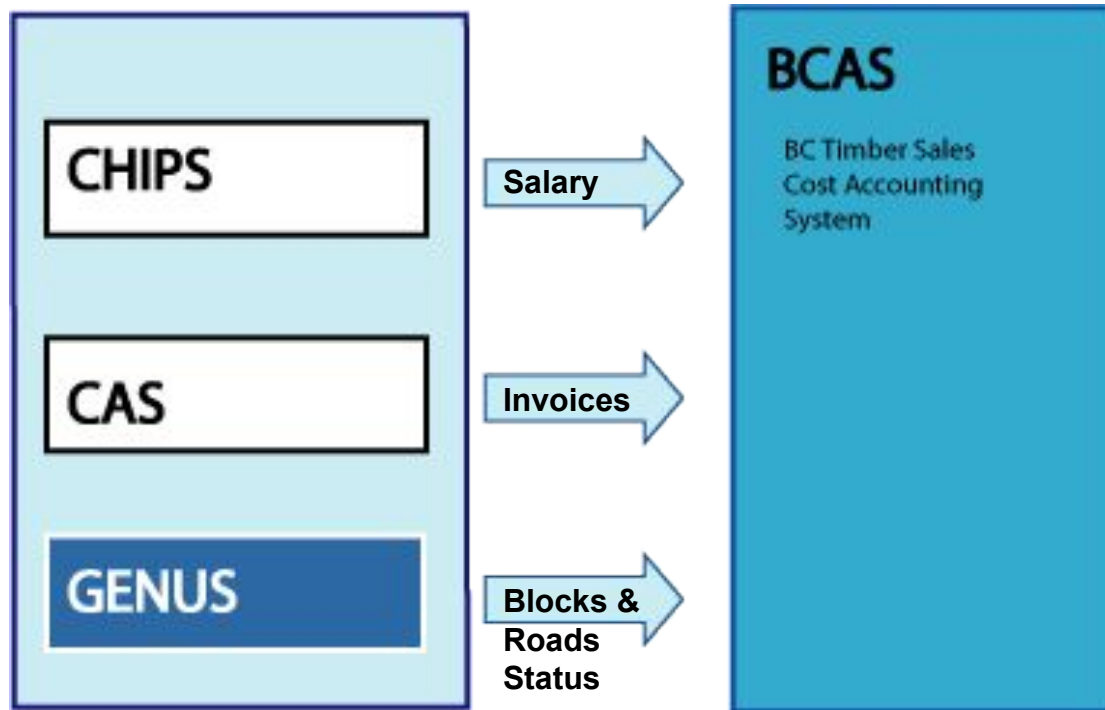
**Approximately  
1000 users**



Approximately  
200 Users



Approximately  
300 Users



**Approximately  
160 Users**

- The FSP Tracking System is the only planning application that establishes critical data elements--specifically:
  - FSPs and amendments
  - Stocking standards
  - Forest Development Units and identified areas



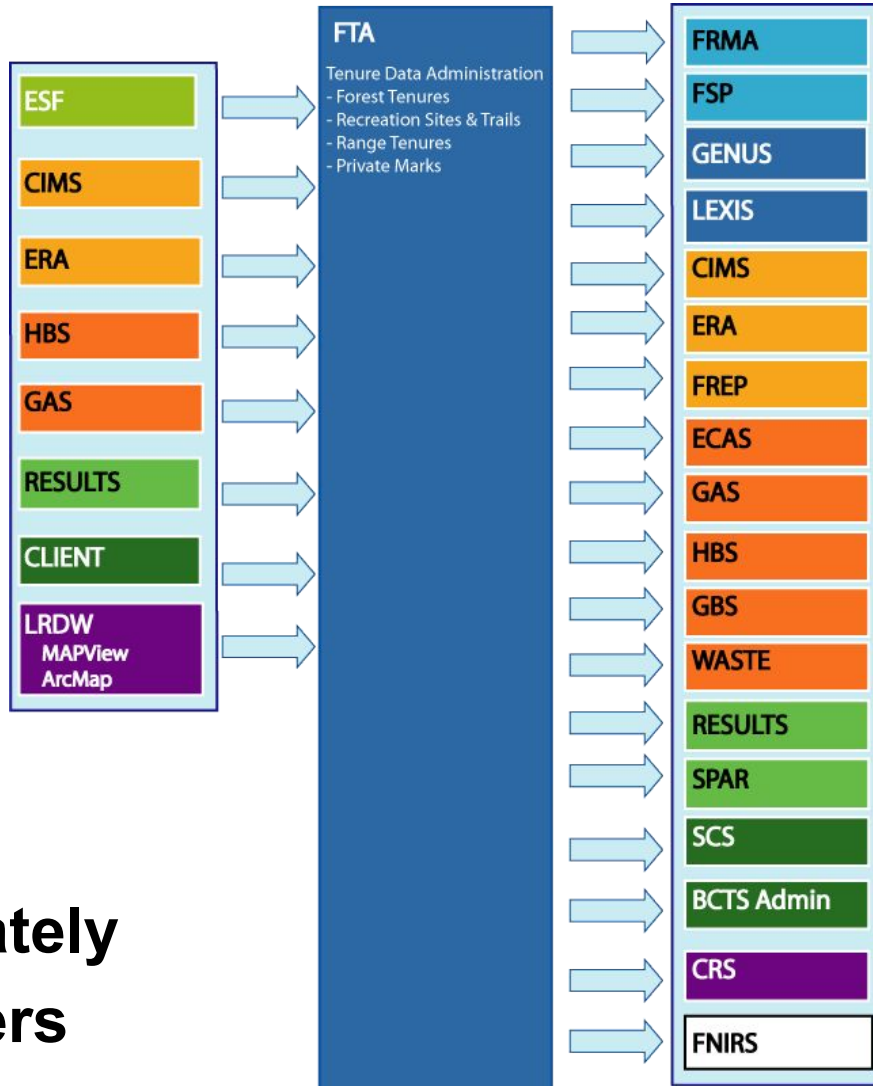
- FSP Tracking System
  - Stocking standards must be entered into the FSP application to become available for use in RESULTS (e.g., assignment to openings)
  - C&E personnel may not have the correct information for conducting inspections if FSP and/or amendments are not properly entered into FSP

- RESULTS
  - If ESF submission fails, data never enters FTA/RESULTS
  - If ESF submission passes, but contains erroneous data, then poor data in FTA/RESULTS

- Resource Management Applications include:
  - Forest Tenures Administration (FTA)
  - Log Exemption Information System (LEXIS)
  - Genus
  - Vegetation Resource Inventory Management System (VRIMS)

# Forest Tenures Administration (FTA)

Resource Management  
Applications

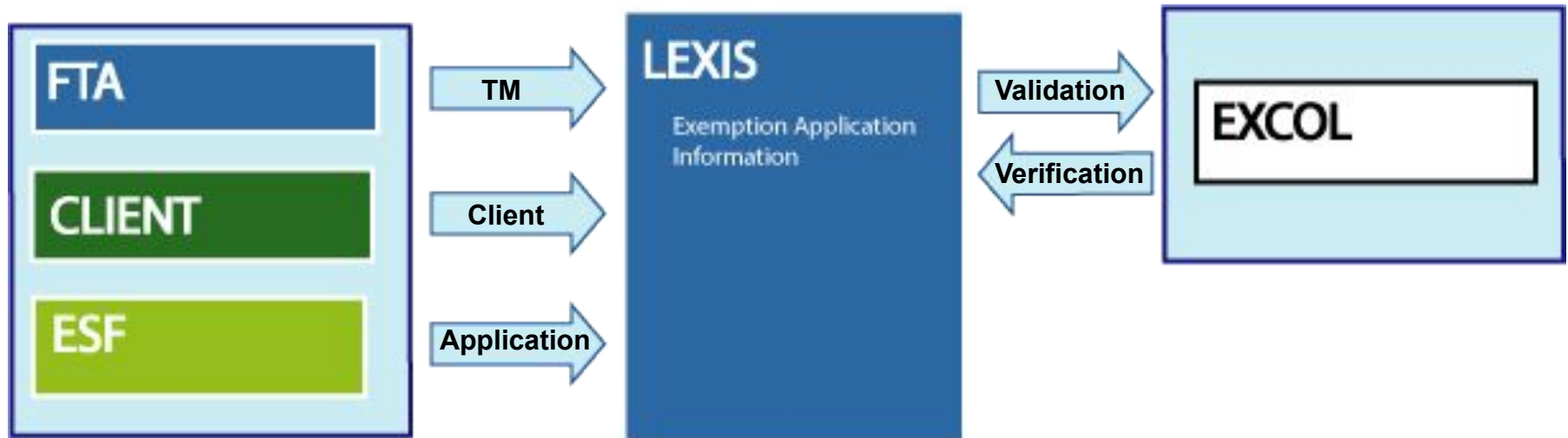


Approximately  
300 users

# Log Exemption Information System

Resource Management  
Applications

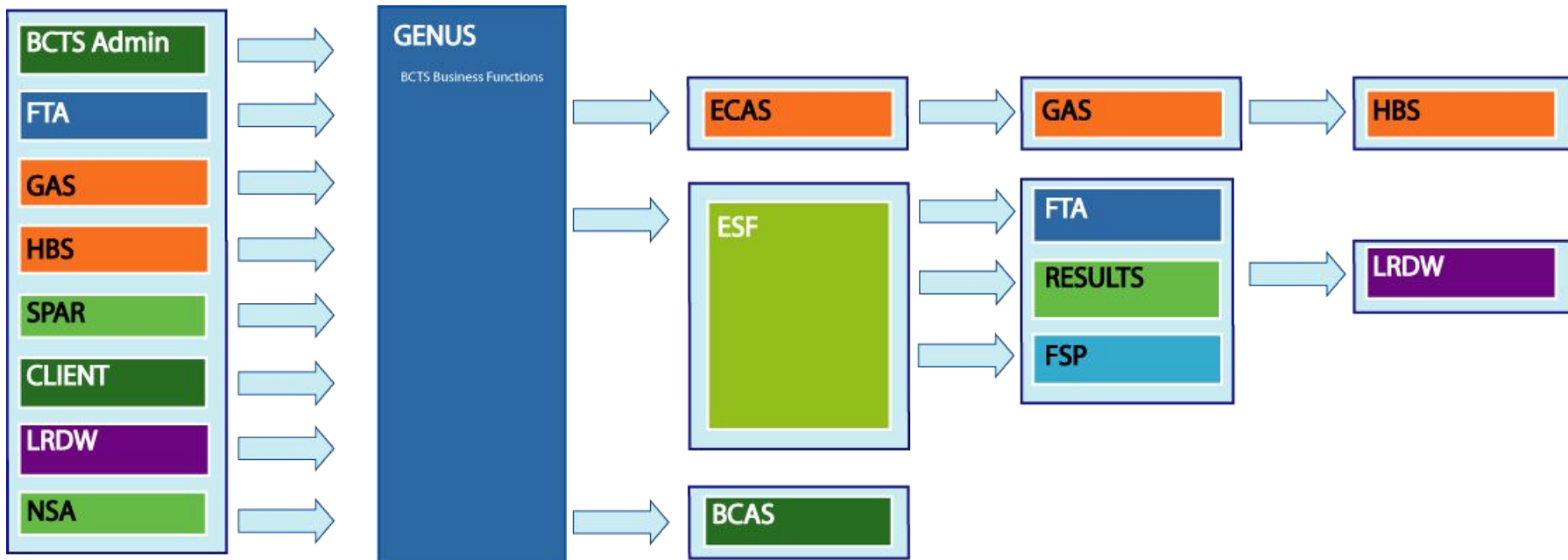
Formerly known as the “Log Export Information System”



Approximately  
200 Users

# GENUS

## Resource Management Applications



Approximately  
800 Users

# Vegetation Resource Inventory Mgmt Sys.

Resource Management  
Applications



Approximately  
20 Users

- Critical data elements established in the Resource Management Applications:
  - Timber Mark
  - Unique Business Key Identifier(s): Licence, Cutting Permit, Cut Block, Road Permit ID, etc.
  - Area
  - Road Length & Road Section
  - Organizational Unit
  - Management Unit ID
  - Application, Permit and Package Numbers
- Dates of data entry are also important!





## Sample Data Dependencies

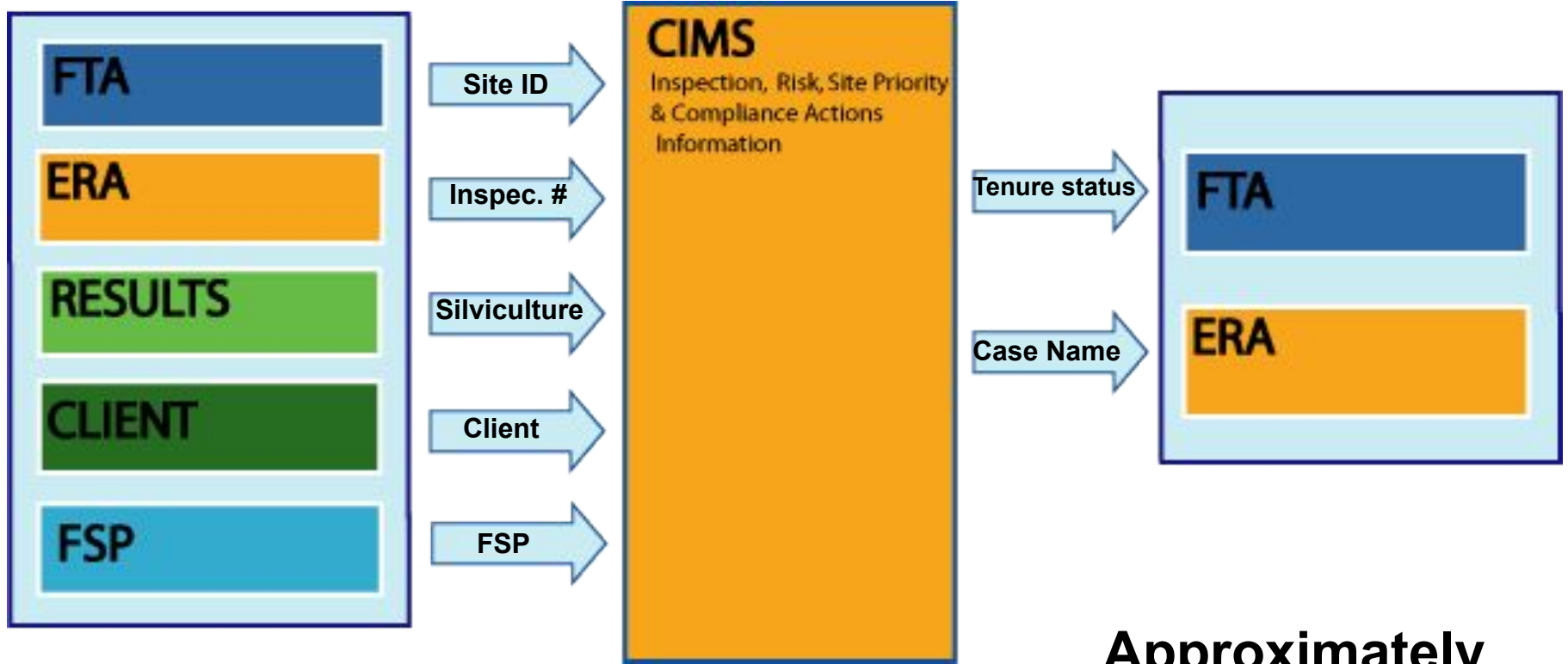
- **FTA, RESULTS, & WASTE**
  - Tenure data being reported on by RESULTS and WASTE must exist in FTA
  - If cut block in FTA and Opening in RESULTS are not established in a correct and timely manner, the work of people using other applications is seriously affected
  - If critical dates are not entered in a correct and timely manner, it is impossible to conduct workflow analysis

- Resource Monitoring Applications include:
  - Compliance Information Management System (CIMS)
  - Enforcement Action, Administrative Review and Appeal Tracking System (ERA)
  - Forest and Range Evaluation Program (FREP)
  - Invasive Alien Plant Program (IAPP)



# Compliance Info. Management System

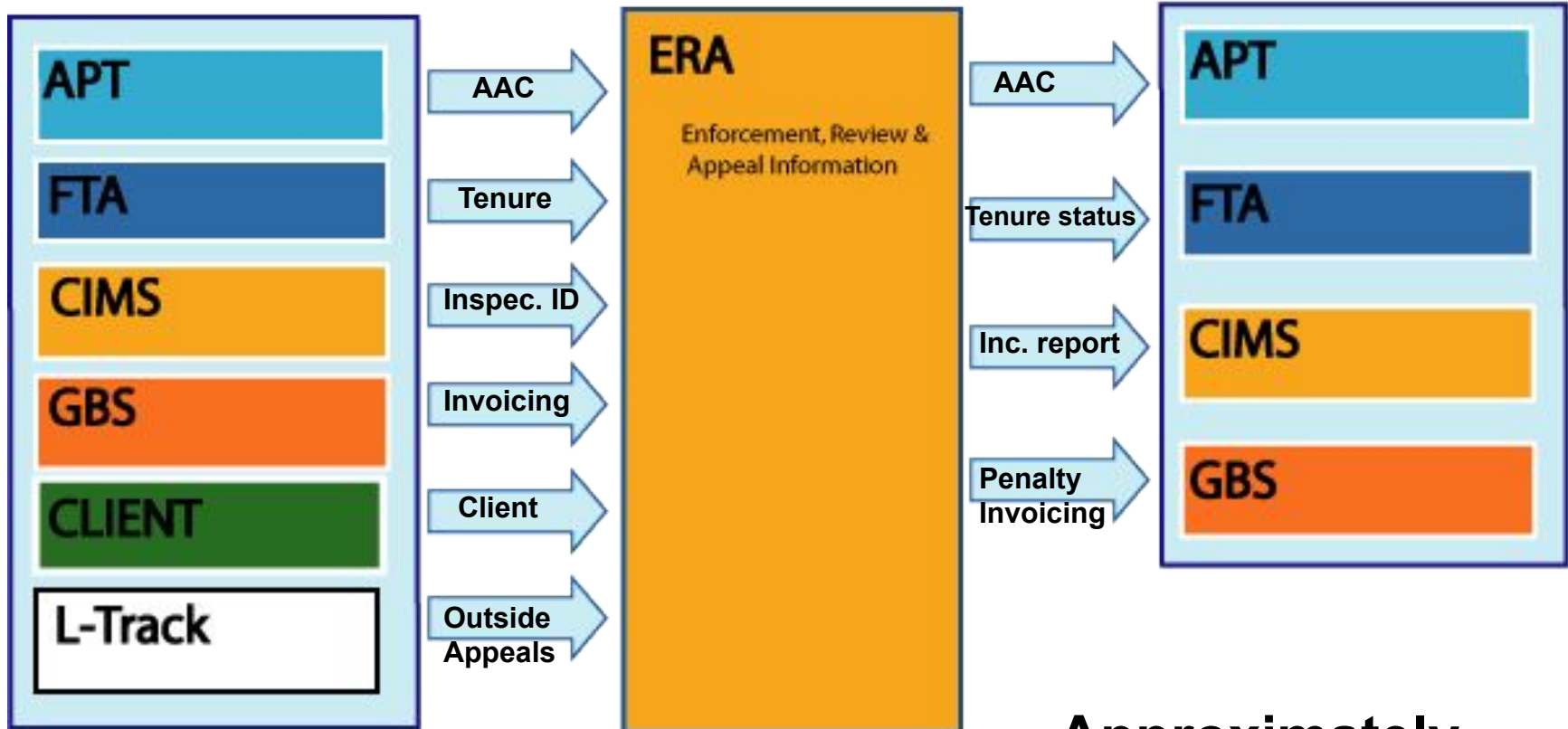
Resource Monitoring Applications



Approximately  
1000 Users

# Enforcement, Review & Appeal Information

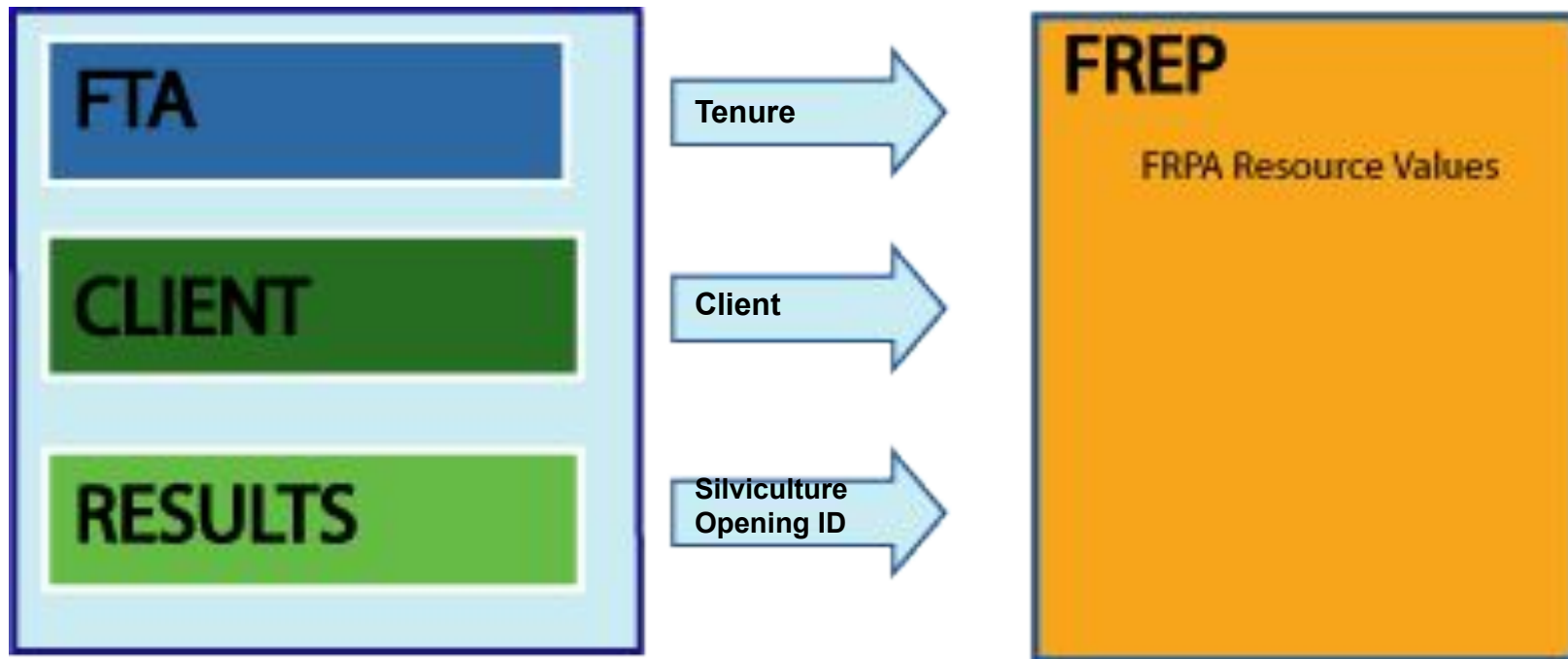
Resource Monitoring  
Applications



Approximately  
400 Users

# Forest & Range Evaluation Program

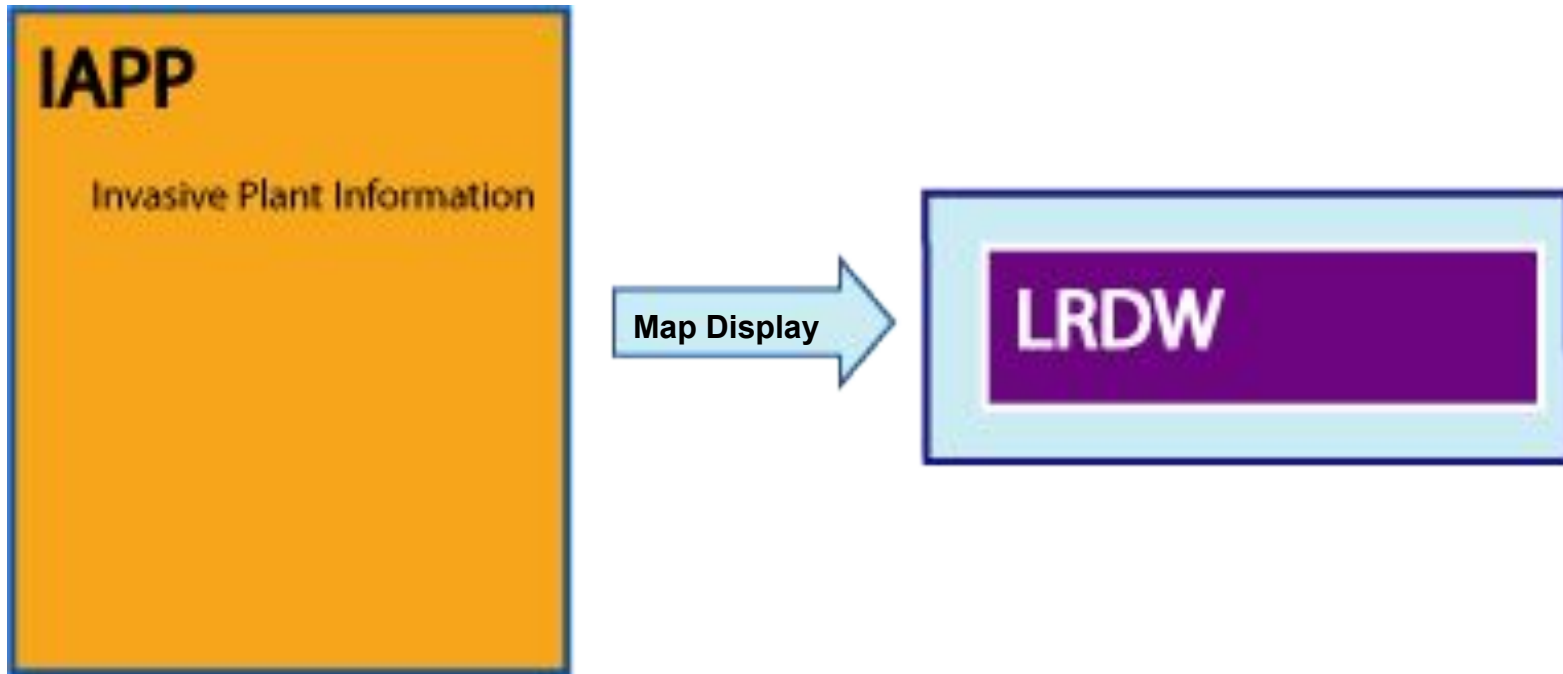
Resource Monitoring  
Applications



**Approximately  
100 – 500 Users**

# Invasive Alien Plant Program (IAPP)

Resource Monitoring  
Applications



**Approximately  
300 Users**

- Critical data elements established in the Resource Monitoring Applications:
  - **Case ID** – this links the CIMS case to ERA & visa-versa

- CIMS & ERA
  - Incorrect Tenure or Client data can lead to:
    - the inspection being thrown out of court
    - duplicate efforts for inspectors
  - Incorrect data may mean high risk sites are not inspected or penalties not invoiced

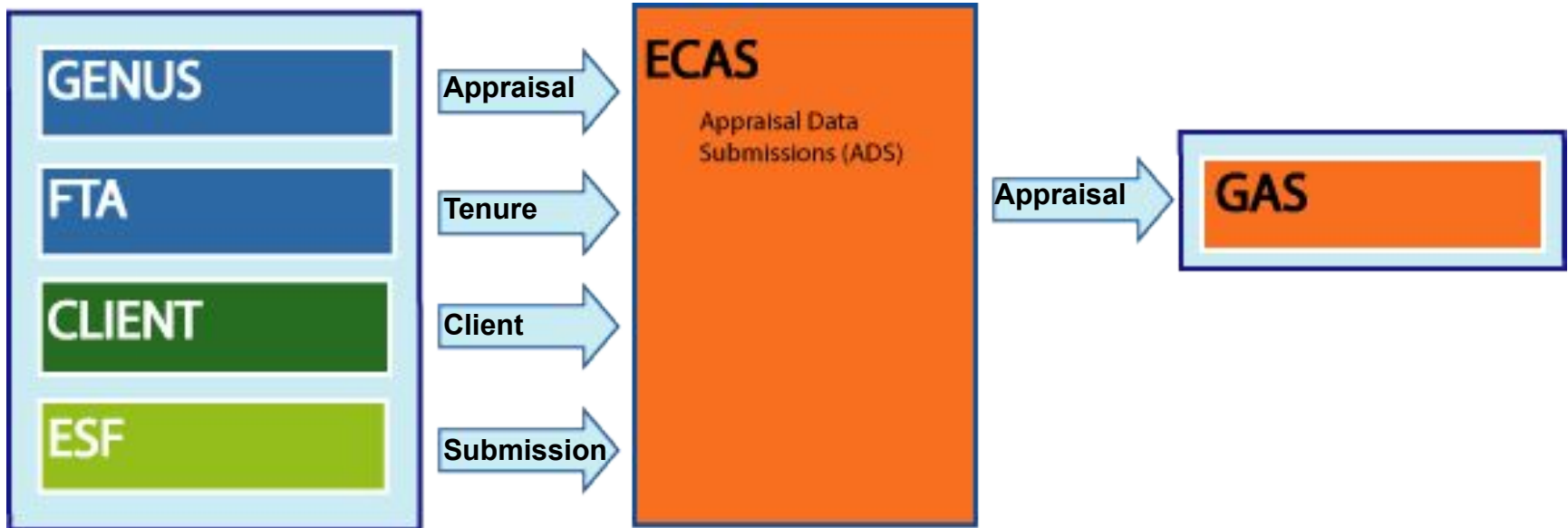


- FREP
  - If RESULTS' Net Area Reforested (NAR) and Gross Area data is not accurate, FREP analysis of the status of some resource values can be compromised
  - If FTA's Cut Block ID or tenure status is inaccurate, evaluations can be compromised

- Pricing & Billing Applications include:
  - Electronic Commerce Appraisal System (ECAS)
  - General Appraisal System (GAS)
  - Harvest Billing System (HBS)
  - General Billing System (GBS)
  - Waste System

# Electronic Commerce Appraisal System

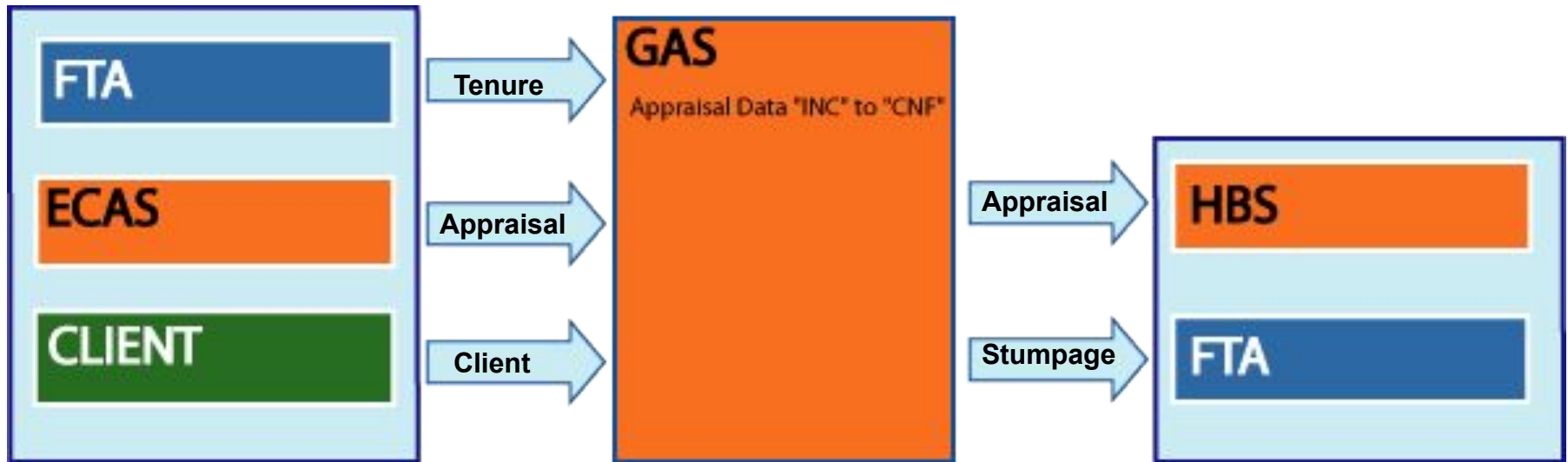
Pricing and Billing  
Applications



Approximately  
4,500 Users

# General Appraisal System (GAS)

Pricing and Billing Applications

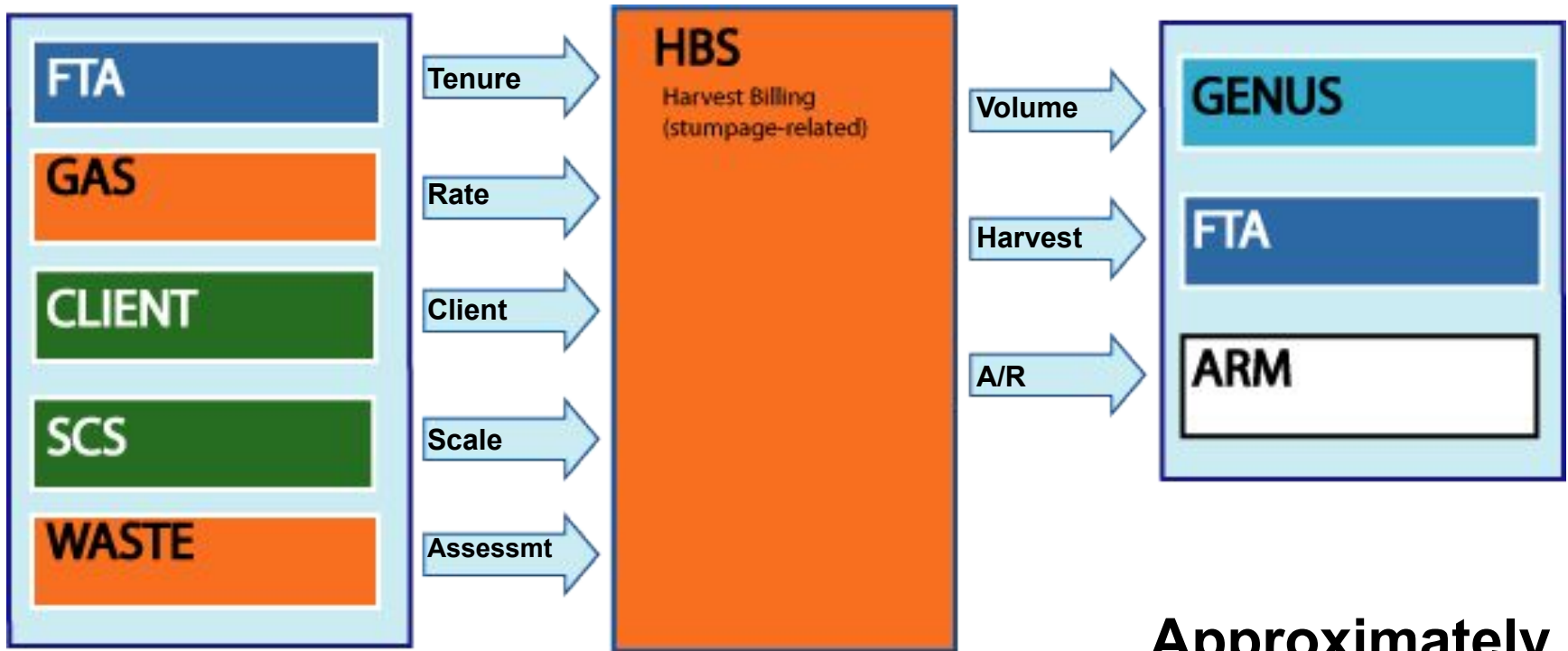


Approximately  
50 Users



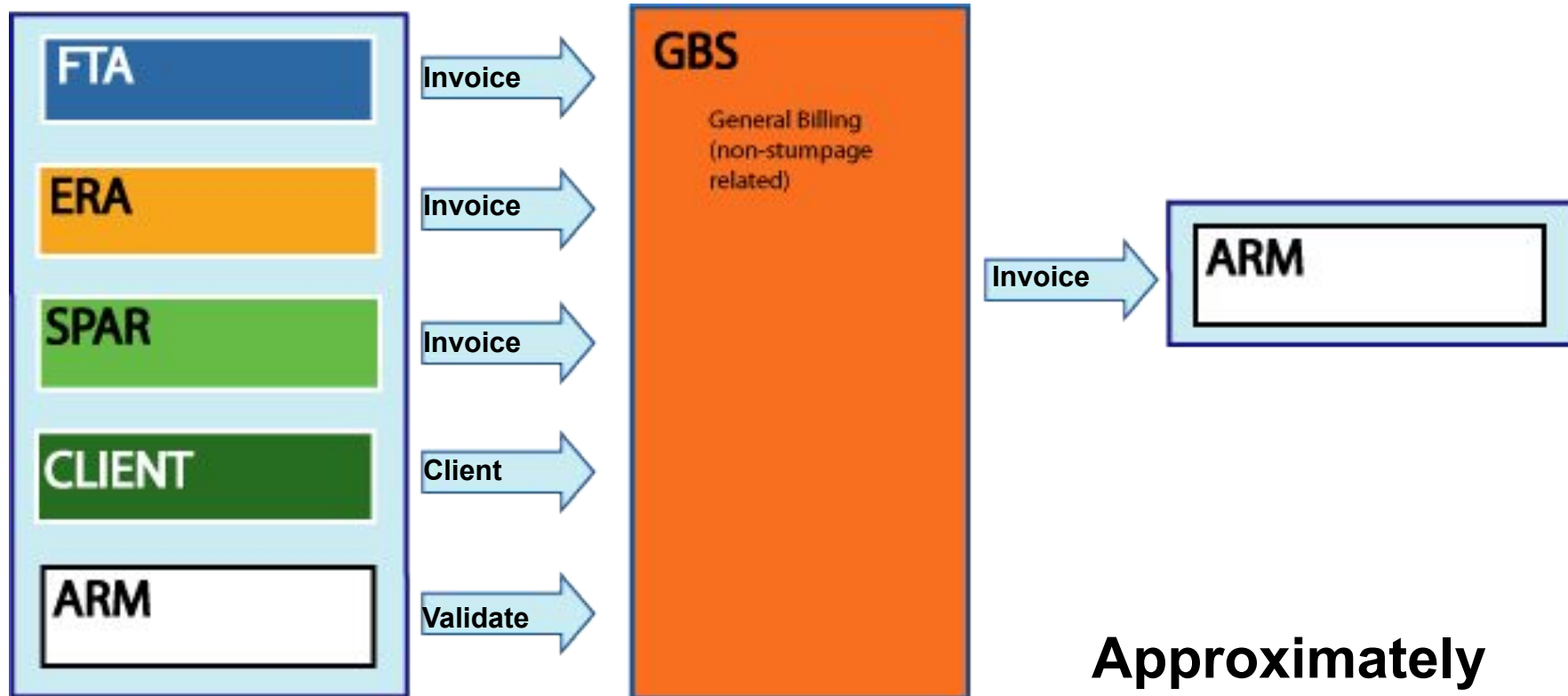
# Harvest Billing System (HBS)

Pricing and Billing Applications

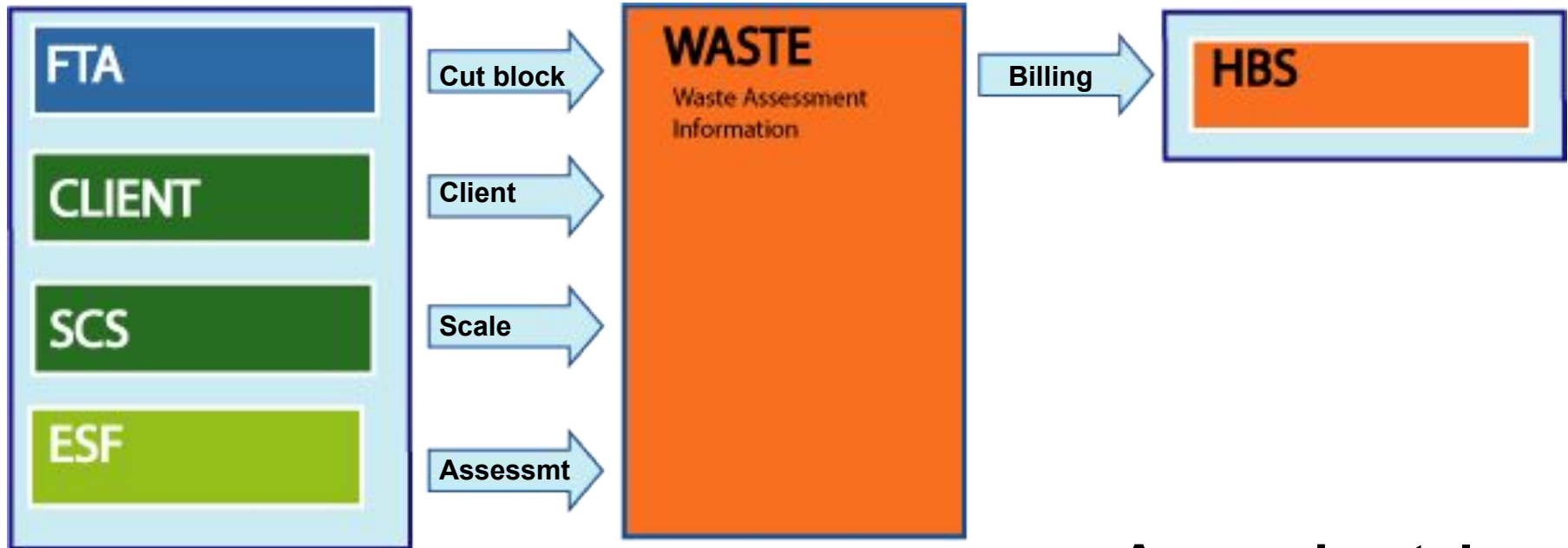


Approximately  
2,800 users

# General Billing System (GBS)



**Approximately  
250 users**



**Approximately  
500- 1000 Users**



## Review of Critical Data Elements

Pricing and Billing  
Applications

- The critical data elements are established in the Pricing & Billing Applications:
  - Harvest Volume X Stumpage Rate = \$ billed
  - Values
  - Invoices
  - Harvest History Information
  - Appraisal Data



- **HBS & GBS**

- HBS is dependent on accurate and timely data in other systems, otherwise scale is unbilled. These are:
  - CLIENT - for matching and correct Client Number
  - FTA - for valid and accurate tenure info
  - ECAS and GAS - for the processing of appraisal data and stumpage
- Poor data in either GBS or HBS impacts billing & collections

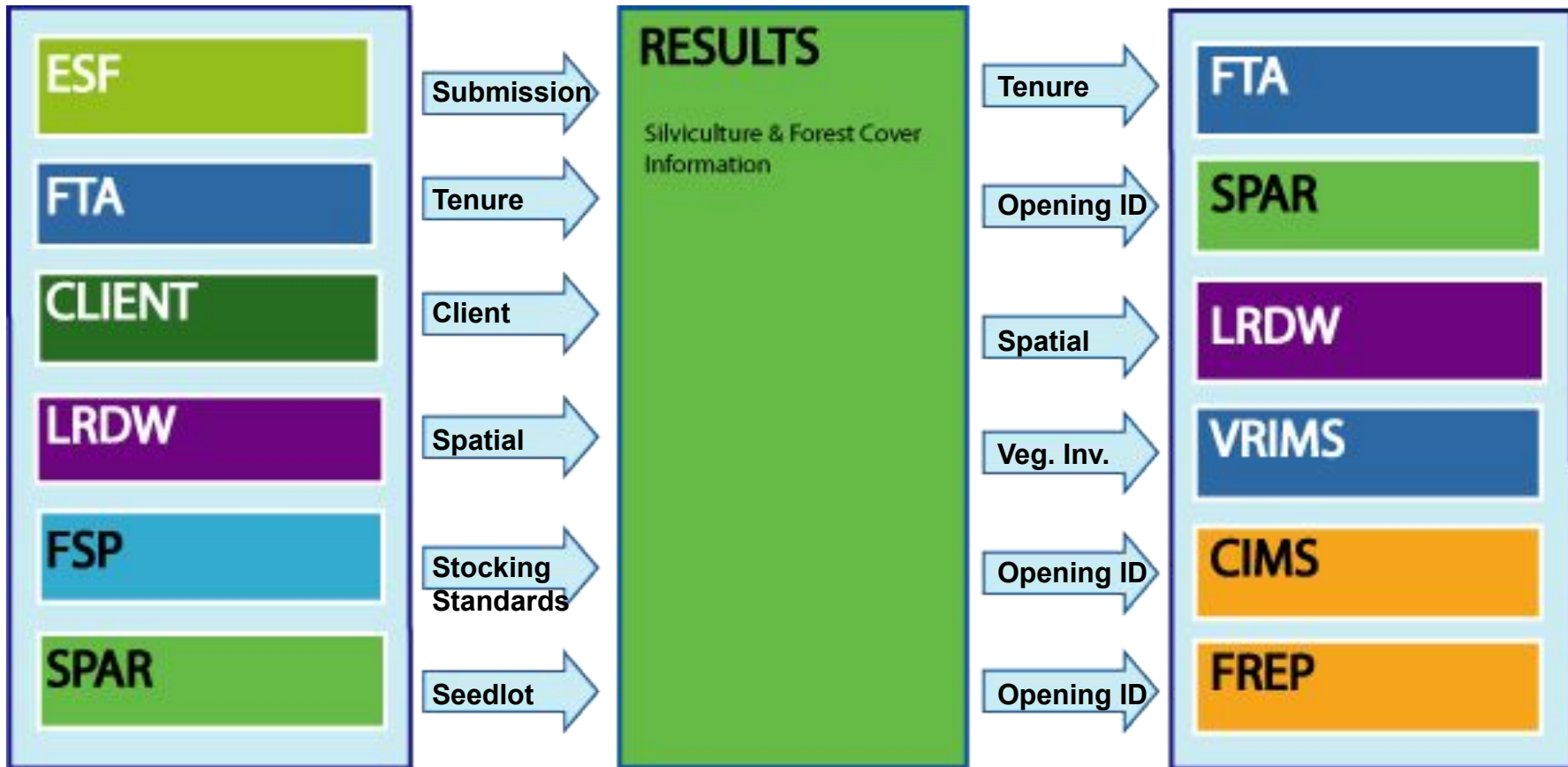
- **CLIENT, ECAS, FTA, GAS, & HBS:**

- Appraisal data may be submitted by Licensee or BCTS into ECAS without the Timber Mark existing in FTA;
- However, Timber Mark must exist in FTA when district sends the appraisal onto the region in ECAS;
- If the Timber Mark in ECAS & FTA do not match, the appraisal data will not load into GAS;
- If the data does not load into GAS, HBS cannot produce an invoice for the Timber Mark; and,
- If HBS is unable to bill for scaled wood, liability is created, and revenue is delayed

- Forest Regeneration Applications include:
  - Reporting Silviculture and Land Status Tracking System (RESULTS)
  - Seed Planning and Registry (SPAR)
  - Nursery and Shipping Admin System (NSA)

# Reporting Silviculture & Land Status Tracking System

Forest Regeneration Applications

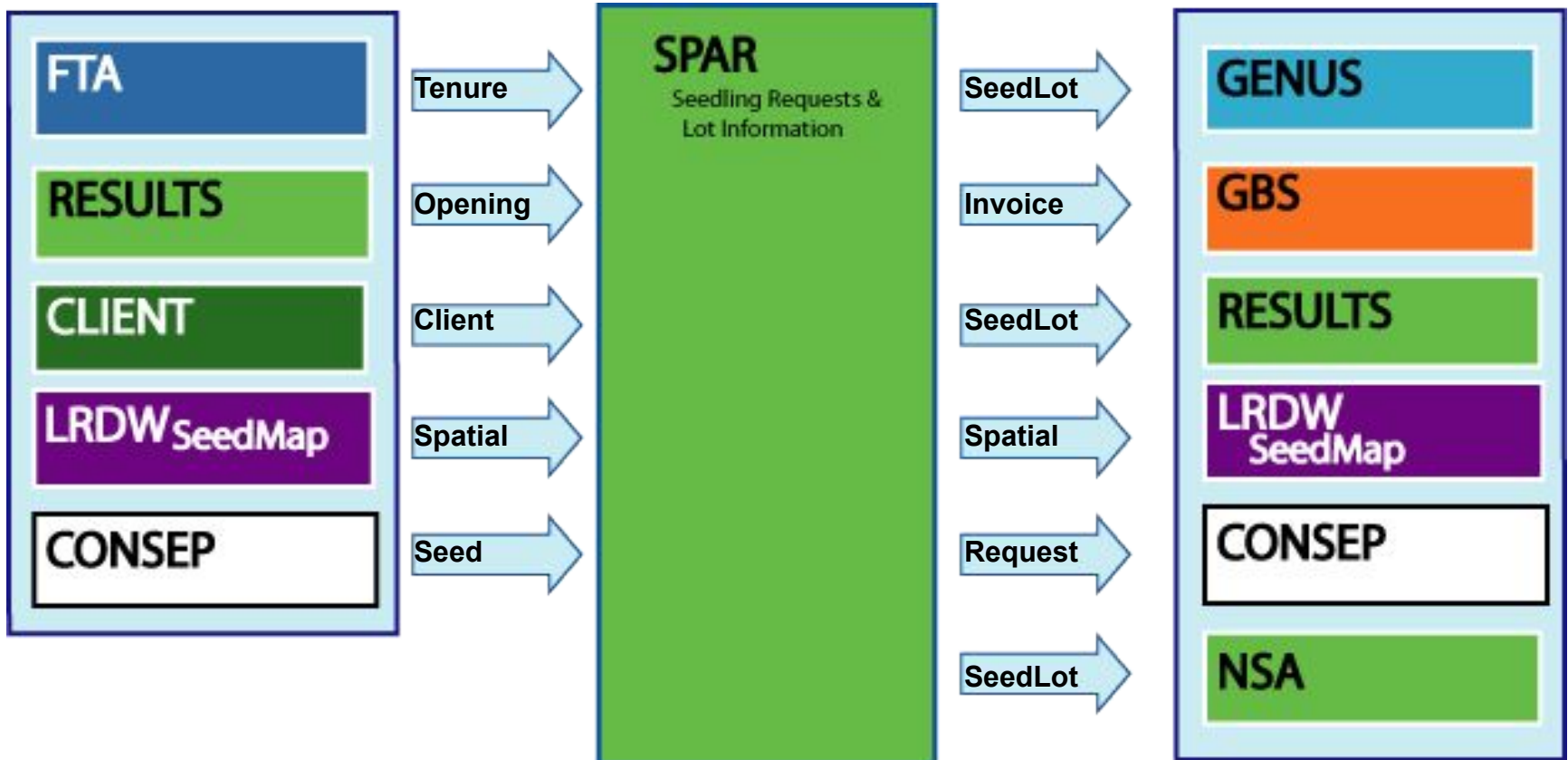


Approximately  
3,000 Users

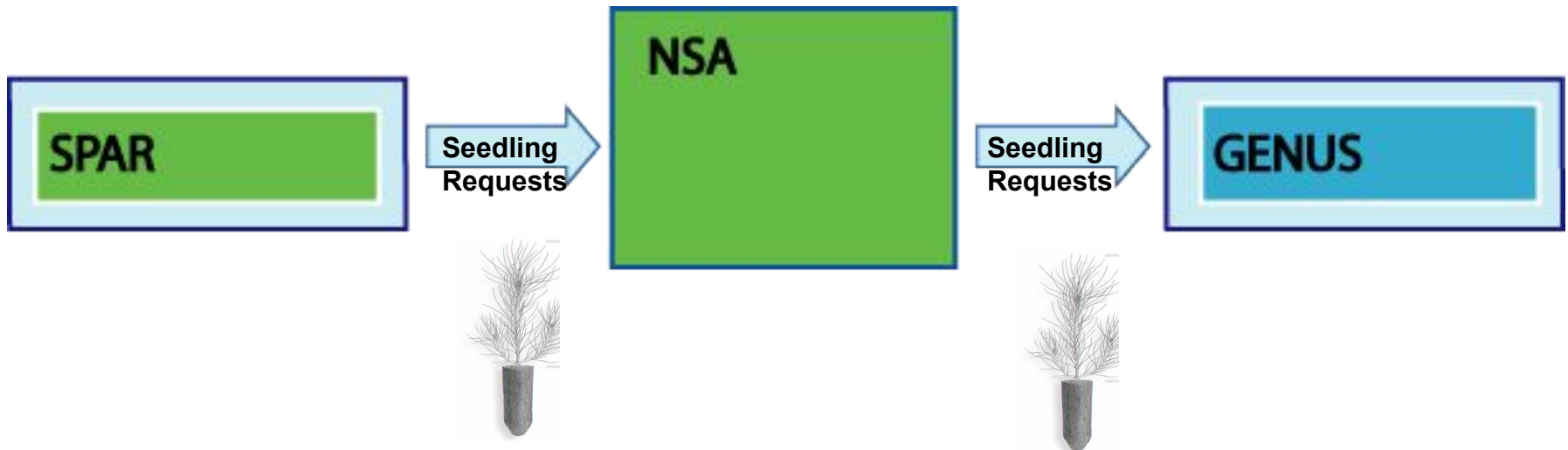


# Seed Planning and Registry (SPAR)

Forest Regeneration Applications



Approximately  
500 users



**Approximately  
150 Users**

- Critical data elements established in the Forest Regeneration Applications:
  - Seedlot & Vegetative Lot ID
  - Seedlot Collection Source
  - Seedling Requests
  - Opening Location
  - Actual Harvest Start Date & Completion Date
  - Location of Planted Seedlots
  - Reforestation Milestone Obligations
  - Forest Cover Land Status Attributes & Location (e.g. NSR, Stocked, Free Growing Stands)

- RESULTS
  - Poor data causes post harvest information to be incorrect in FTA & CIMS, and missed in VRIMS
  - C&E staff may have difficulties completing silviculture inspections if opening information (e.g. area of NAR, amendments) are not properly added to RESULTS
  - Affects government and licensees who depend on Vegetative Inventory information
  - Missing Standard Units & Actual Harvest Dates causes issues within RESULTS
  - Poor data could cause an overestimation of available timber

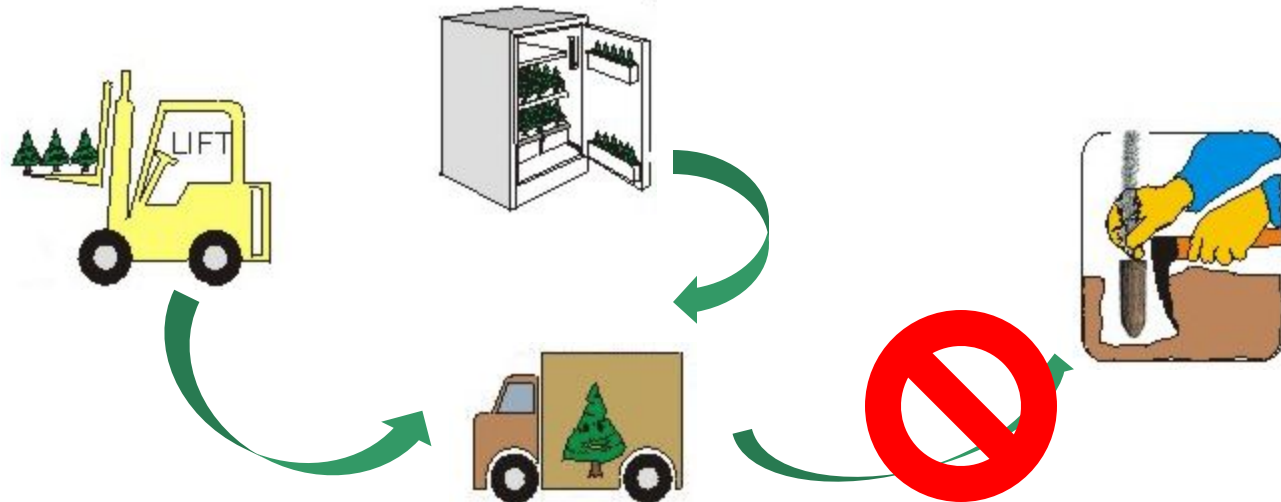




## Sample Data Dependencies (cont.)

- SPAR
  - Poor client data causes incorrect invoicing information & billings for the wrong client
  - NSA relies heavily on SPAR data. If data is incorrect in SPAR, this has significant effects on NSA

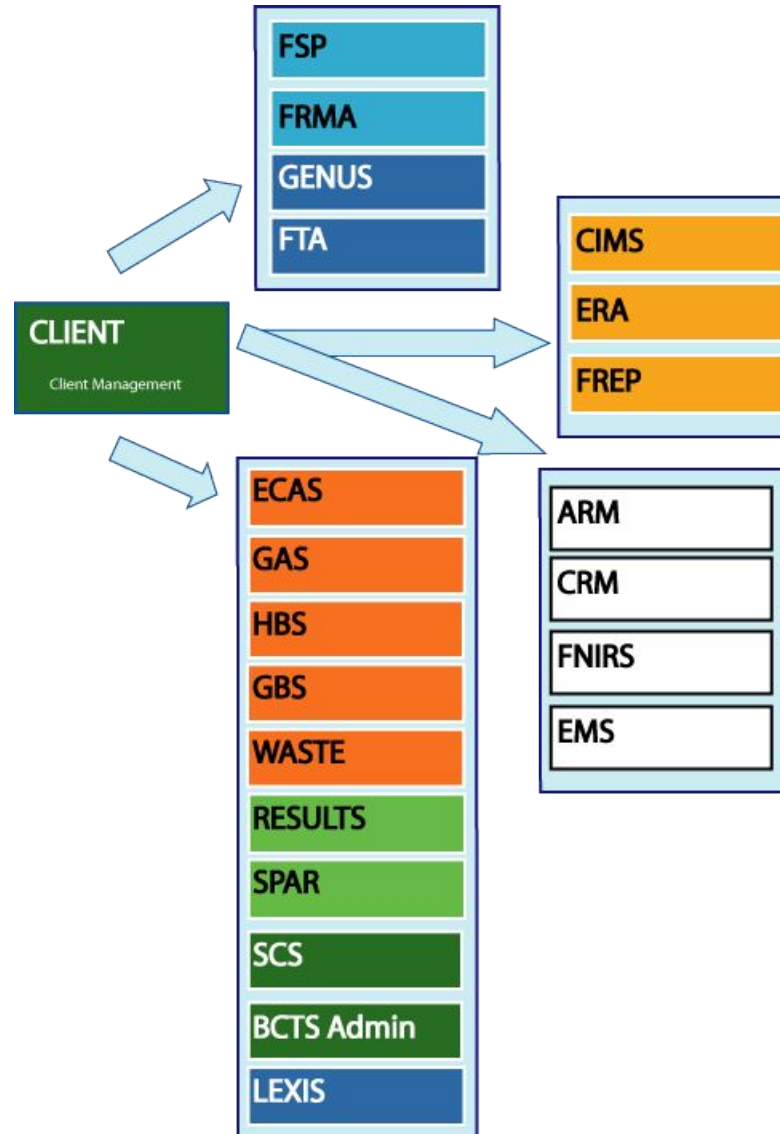
- NSA
  - Incorrect or unknown seedling lift or shipping data could result in seedlings being mis-managed
  - Could result in seedling disposal before they reach the planting site



- Administration Applications include:
  - Client Management System (CLIENT)
  - Scaling Control System (SCS)
  - Enterprise Documents Records Management System (EDRMS)
  - BCTS Administration System (BCTS Admin)

# Client Management System (CLIENT)

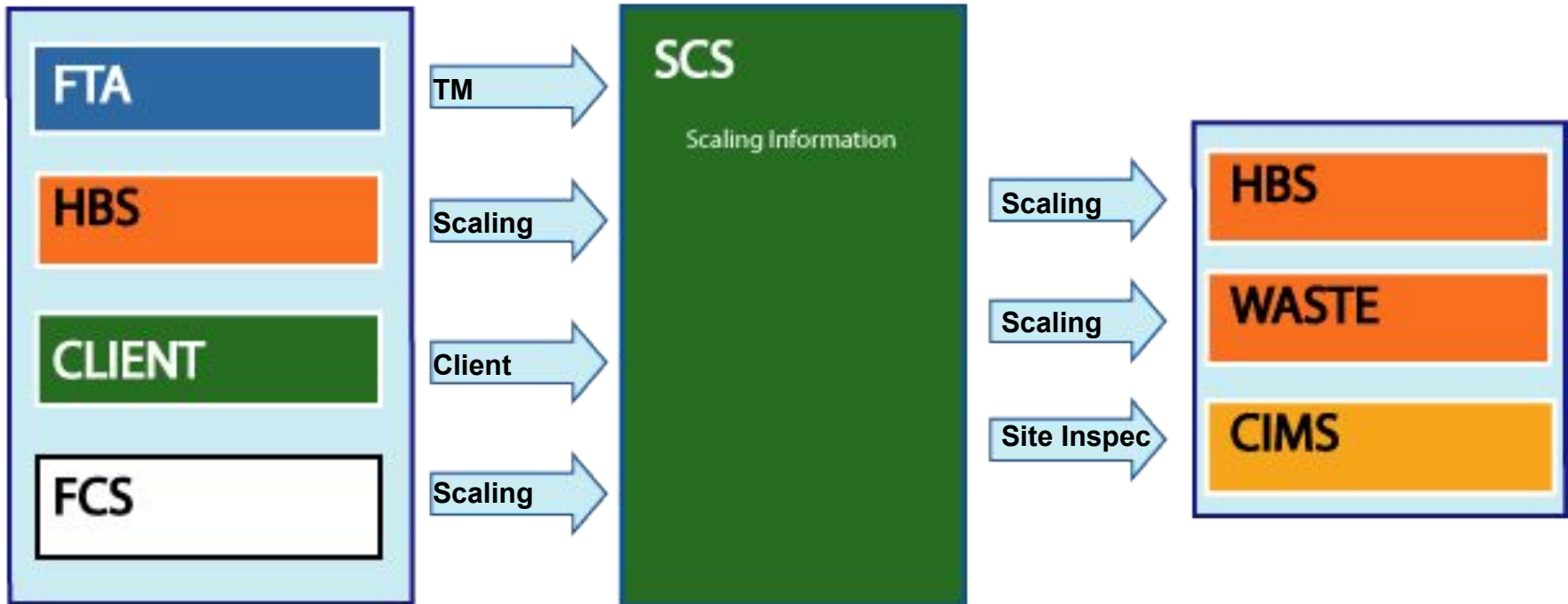
Administration  
Applications



Approximately  
5,000 Users

# Scale Control System (SCS)

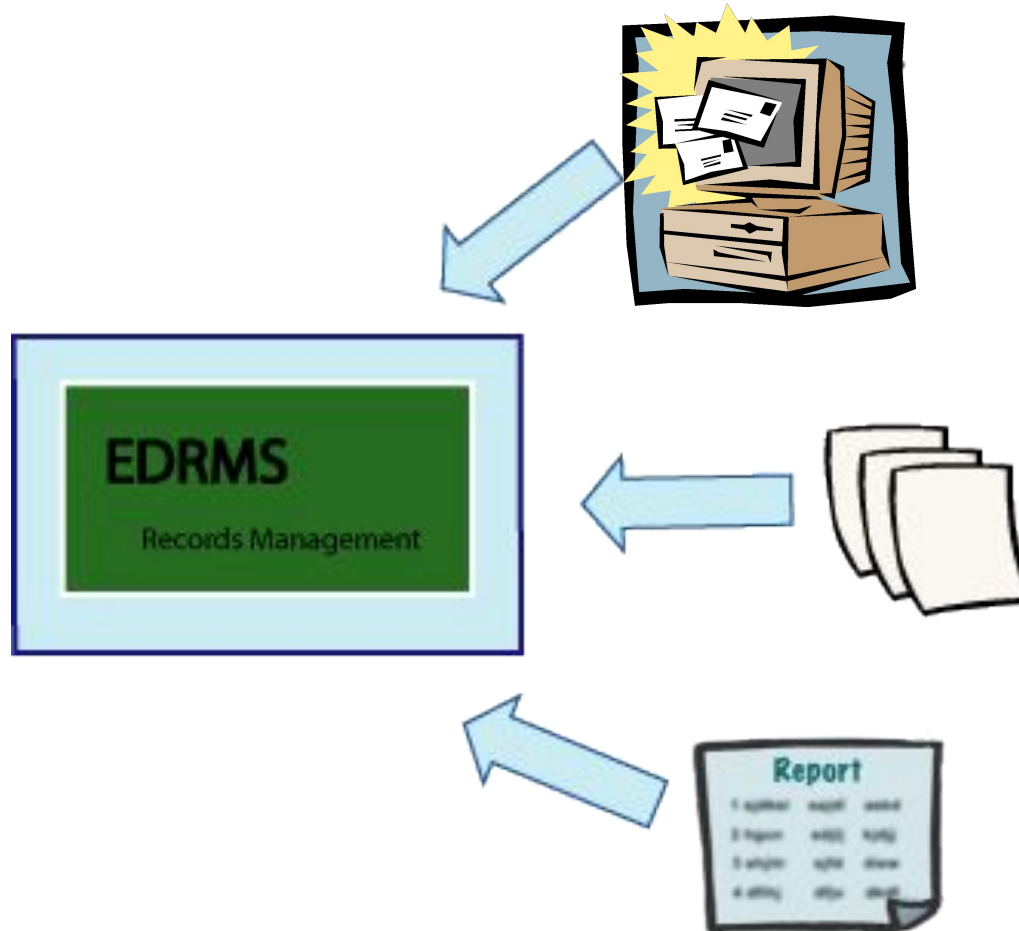
Administration  
Applications



Approximately  
250 users

# Enterprise Document Records Management

Administration  
Applications



All employees have access on their desktop



**Approximately  
60 Users**

- Critical data elements established in the Administration Applications:
  - Client # & Client Location
  - Scale Site
  - Scaler
  - Scale Site Inspections
  - Electronic records



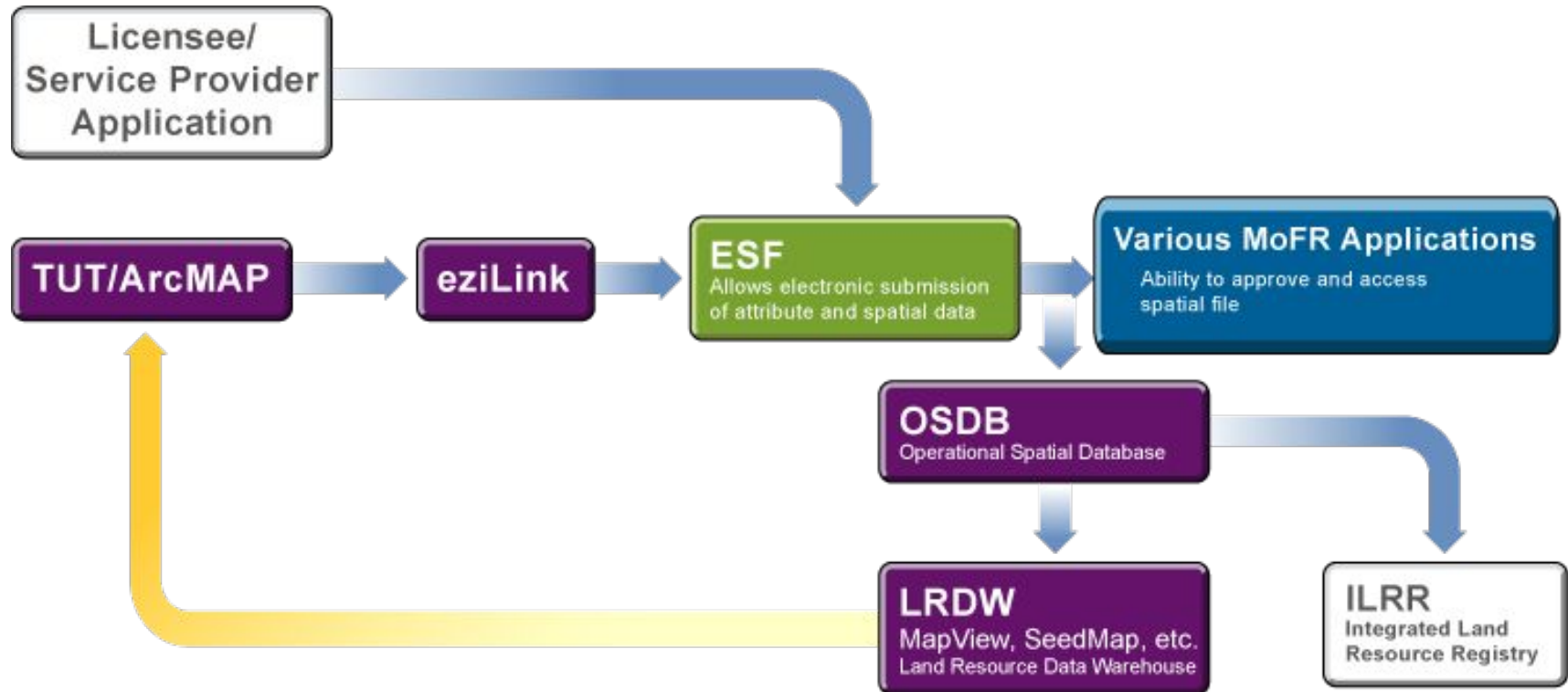
## Sample Data Dependencies

- **CLIENT**
  - An error in CLIENT data can have numerous repercussions (i.e. invoicing, enforcement actions, inability of client to submit data)
- **SCS**
  - Poor data in SCS will impact invoicing in HBS
- **EDRMS**
  - Unmanaged records can lead to lost records, confusion over versions, and increased search and retrieval time

Spatial Data Stores	Spatial Data Viewing & Editing
OSDB LRDW	MapView TUT/ArcMap SeedMap

# Understanding the flow of spatial data

Spatial Applications



## Review of Critical Data Elements

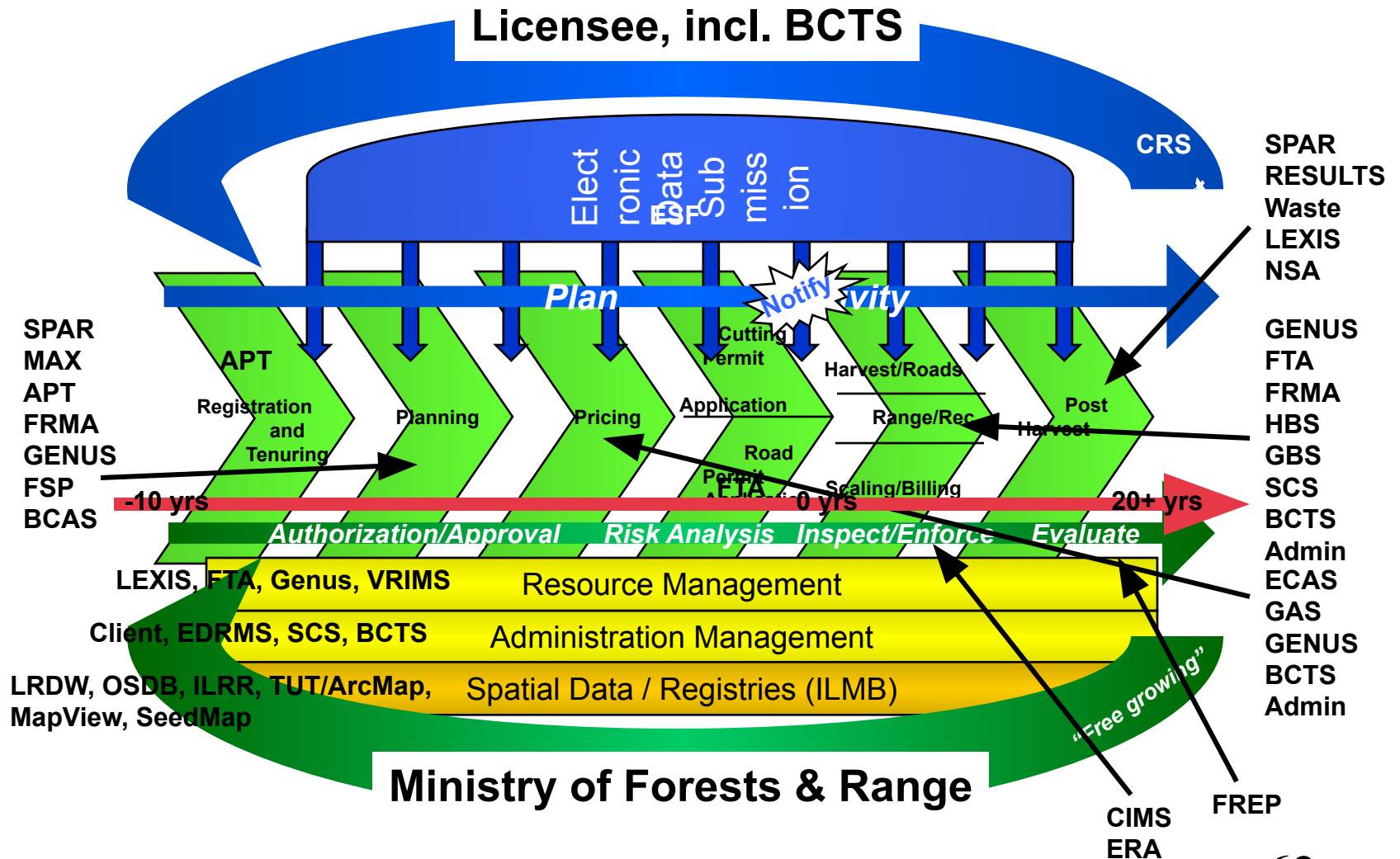
- Critical data elements referenced in the Spatial Applications:
  - Spatial location of cut blocks and roads – this is established in LRDW
  - Spatial location of Forest Development Units and identified area boundaries (from FSP)
  - Spatial location of Openings for “cut in” on existing vegetation data
  - Spatial location of forest cover
  - Spatial location of seedlot collection source

# Summary of Critical Data Elements



Data Broker Applications:		ESF	CRS				
Key Applications	<b>Planning Applications</b> APT    FRMA MAX    FSP BCAS	<b>Resource Management Applications</b> LEXIS    FTA GENUS VRIMS	<b>Resource Monitoring Applications</b> CIMS    ERA FREP IAPP	<b>Pricing and Billing Applications</b> ECAS    HBS GAS    GBS WASTE	<b>Forest Regeneration Applications</b> RESULTS    SPAR NSA	<b>Administrative Applications</b> CLIENT    ED RMS SCS    BCTS ADMIN	<b>Spatial Applications</b> SeedMap TUT/ArcMap Map View    LRDW OSDB    ILRR
	Key Data Elements	<ul style="list-style-type: none"> <li>• Stocking Standards (FRPA blocks)</li> <li>• Forest Development Units (FDUs)</li> <li>• Identified Areas</li> <li>• Forest Stewardship Plans (results, strategies, measures)</li> </ul>	<ul style="list-style-type: none"> <li>• Timber Mark (Date, Status, Type)</li> <li>• Unique Business Key Identifier:               <ul style="list-style-type: none"> <li>◦ Licence</li> <li>◦ Cutting Permit</li> <li>◦ Cut Block</li> <li>◦ Road Permit ID</li> </ul> </li> <li>• Area</li> <li>• Road Length</li> <li>• Road Section</li> <li>• Organizational Unit</li> <li>• Management Unit Id</li> <li>• Dates</li> <li>• Application Number</li> <li>• Permit Number</li> <li>• Package Number</li> </ul>	<ul style="list-style-type: none"> <li>• Case ID</li> </ul>	<ul style="list-style-type: none"> <li>• Appraisals Data               <ul style="list-style-type: none"> <li>◦ Volume</li> <li>◦ Values</li> <li>◦ Stumpage Rate</li> </ul> </li> <li>• Invoices</li> <li>• Harvest History Information</li> </ul>	<ul style="list-style-type: none"> <li>• Seedlot/Vegetative Lot ID</li> <li>• Seed Test Results</li> <li>• Seedling Requests</li> <li>• Opening Location</li> <li>• Stocking Standards (FPC blocks)</li> <li>• Actual Harvest Start &amp; Completion Date</li> <li>• Location of Planted Seedlots</li> <li>• Reforestation Milestone Obligations</li> <li>• Forest Cover Land Status (Attributes and Location)</li> </ul>	<ul style="list-style-type: none"> <li>• Client number</li> <li>• Client Location</li> <li>• Scale Site Inspections</li> <li>• Scale Site</li> <li>• Scaler</li> </ul>

# Understanding the MoFR Business Flow



## Summary

- Understanding system inter-dependencies is critical to the success of the business
- Correctly entering & updating critical data elements is key to data sharing between applications
- Timely entry of data is just as important as the data entry itself
- Understanding “The Big Picture” is just as important as knowledge of each application

# IMG's Business Information Centre (BIC)



Ministry Homepage

IMG Homepage

Section Contents

- [BIC Home](#)
- [System View Home](#)
- [Major MoFR Systems](#)
- [MoFR Application List](#)

Information Links

- [Data Model Information](#)
- [MoFR Spatial Information](#)
- [Integrated Data Dictionary](#)
- [Integrated Spatial Data Dictionary](#)

Other Links

- [IMG Data Administration Section](#)
- [Business Application Services Section](#)
- [Projects - Planned or Under Development](#)

*Do you need more information on a MoFR Application?*

Visit the Business Info. Centre

- Resource for 10 key systems
- Organized lists of all MoFR systems
- Links to systems documentation
- Links to training documentation

[www.for.gov.bc.ca/his/bic/System/index.htm](http://www.for.gov.bc.ca/his/bic/System/index.htm)