

Using Parcel Administrator at KGIS & Hamilton County, TN to Track and Manage Parcel Transactions in GIS and CAMA

2015 SERUG Conference
May 5, 2015

Achieving Integration Without Hurting Yourself

2015 SERUG Conference
May 5, 2015

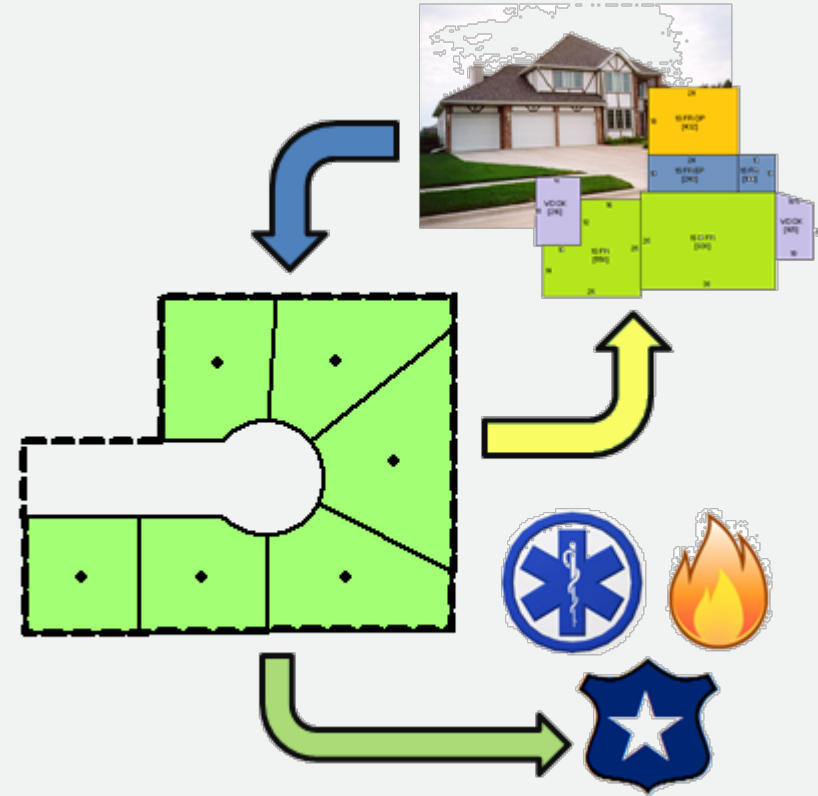


Agenda

Van O'Brien

Director of Solutions and Services

- **Integration**
- **Transactional Data**
- **Workflows**
- **Data Entry**
- **Case Studies**



Integration

- **Front-End Integration**
 - **A tale as old as GIS itself**
 - **Connectivity to other systems (Tax/CAMA)**
 - **Joins/relates – live link**
- **Back-End Integration**
 - **Movement of transactional data**
 - **Reduction of duplicate entry tasks – silos**
 - **Enter some data, and everything just happens**

Transactional Data

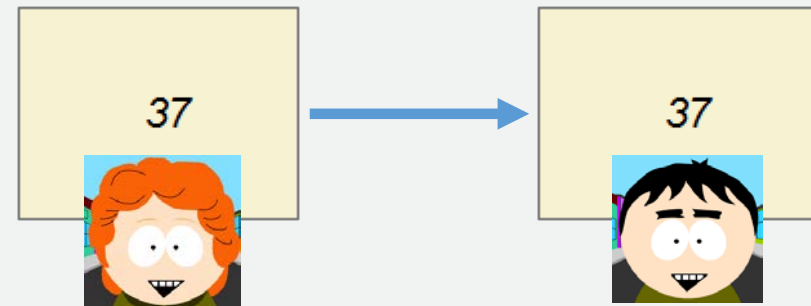
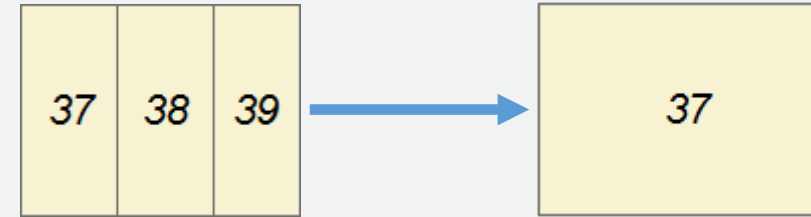
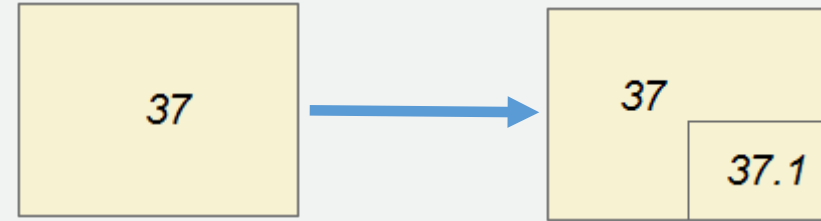
Land Records

- **Every change to a land record in a county/city requires entry into one or more systems**
- **Recorder / Mapper / Appraiser**
- **Creates data silos and duplicate entry**
- **Duplicate entry begets inconsistencies and inefficiencies**

Transactional Data

Types

- **Universal**
 - Splits
 - Merges
 - Straight Transfers
- **Regional**
 - Boundary Line Adjustments
 - Annexations
 - Sub-Surface rights



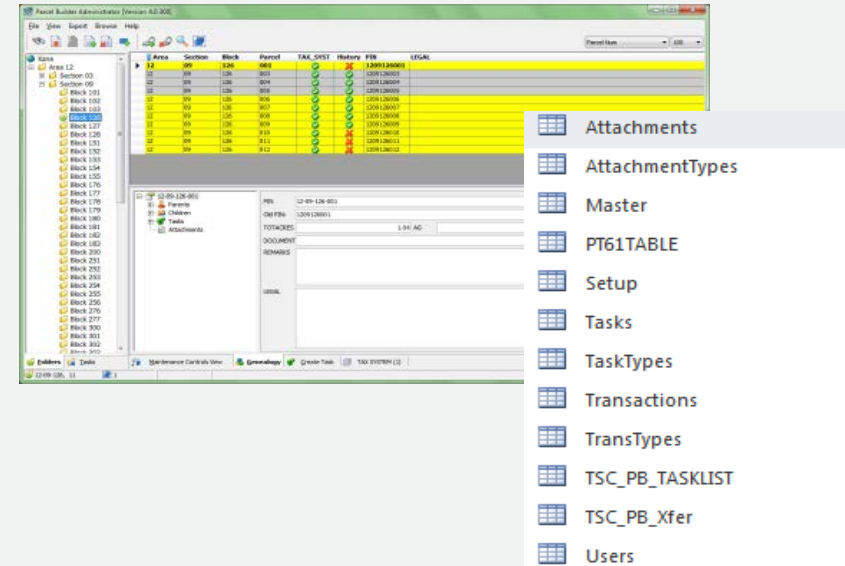
Transactional Data

- **Instrument**
 - **The origin of the transaction (deed, survey, adjustment, etc.)**
 - **What the action is (splits, merges, etc.)**
- **Triggers**
 - **What happens to parcels/accounts (new, modified, retired)**
- **Attributes**
 - **All the information that needs to be carried through the system and qualifies the transaction.**

Software

Parcel Administrator

- **Used primarily to manage PIN's**
 - Links number to parcel feature in GIS
- **Creates digital transaction data**
- **Stores historical transactions**
- **Manage attributes and dispersal on splits in GIS and Tax**
- **Configurable for different jurisdictions**
- **Interacts with parcel fabric (with history**



Software

- **Tasks - Instrument**
 - **Every event is entered as a task (split, merge, etc)**
 - **Collection of transactions**
- **Transactions - Triggers**
 - **Something happens to the parcel – add / modify / retire**
 - **All based on the parcel number**
- **Attributes**
 - **Where the largest variety happens: how much and when?**

Transactional Data

Task Editor

Task Mode: Add New Task

Task Type: Split

Date: 05/03/2015 Time: 3:48:46 PM

Add Child Parcels:

Num to Add: 2 Start From: 0101308005

Next Available

Task

ROLE	TRANSACTION	PIN	OWNER_PRIMARY	ACREAGE	TRANS GRANTOR
		0101308001	Dora S. Chupp	0.544	<Null>
ROLE	TRANSACTION	PIN	OWNER_PRIMARY	ACREAGE	TRANS GRANTOR
		0101308001	Dora S. Chupp	0.2	<Null>
		0101308004	Roger Faisbahl	0.144	
		0101308005	Steve Guntz	0.2	

Transaction

Attributes

Transactional Data

Swap Table

PB_TASKID	PB_TRANSID	PB_GUID	PB_TASKTYP	PB_TRANSTY	PB_PARENT	PB_PARENT_ACRES	PB_CHILD	PB_CHILD_ACRES	PB_STATUS	PB_STATUSM	PB_TAXYEAF
26	1	8E8F097771F84	Split	Modify	0101308001	0.2	0101308001	0.2	3		2015
26	2	8E8F097771F84	Split	Add	0101308001		0101308004	0.144	3		2015
26	3	8E8F097771F84	Split	Add	0101308001		0101308005	0.2	3		2015

Task

Transaction

Attributes

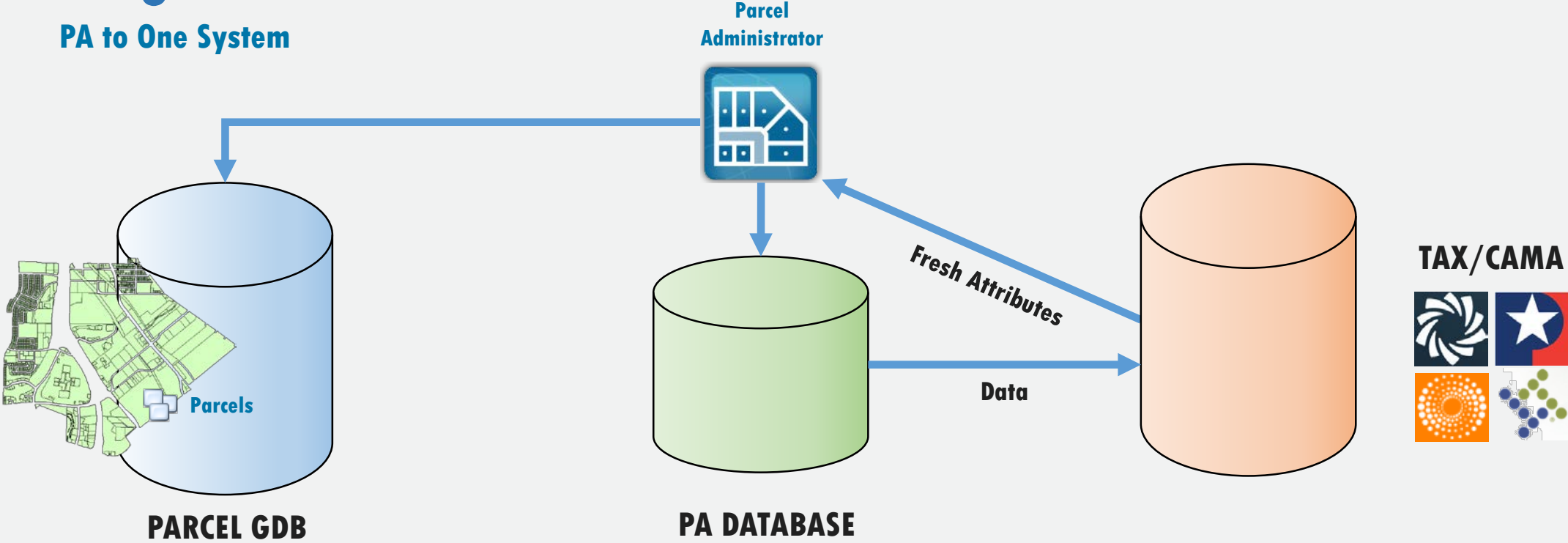
PB_TIMEOPEN	PB_USEROPEN	PB_TIMECLOSE	PB_USERCLC	PB_COMMEI	M_OWNER
3/12/2014 10:51:16 AM	SIDWELLGIS:OBrien				Dora S. Chupp
3/12/2014 10:51:16 AM	SIDWELLGIS:OBrien				Roger Faisbahl
3/12/2014 10:51:16 AM	SIDWELLGIS:OBrien				Steve Guntz

Business

Workflows

Configuration

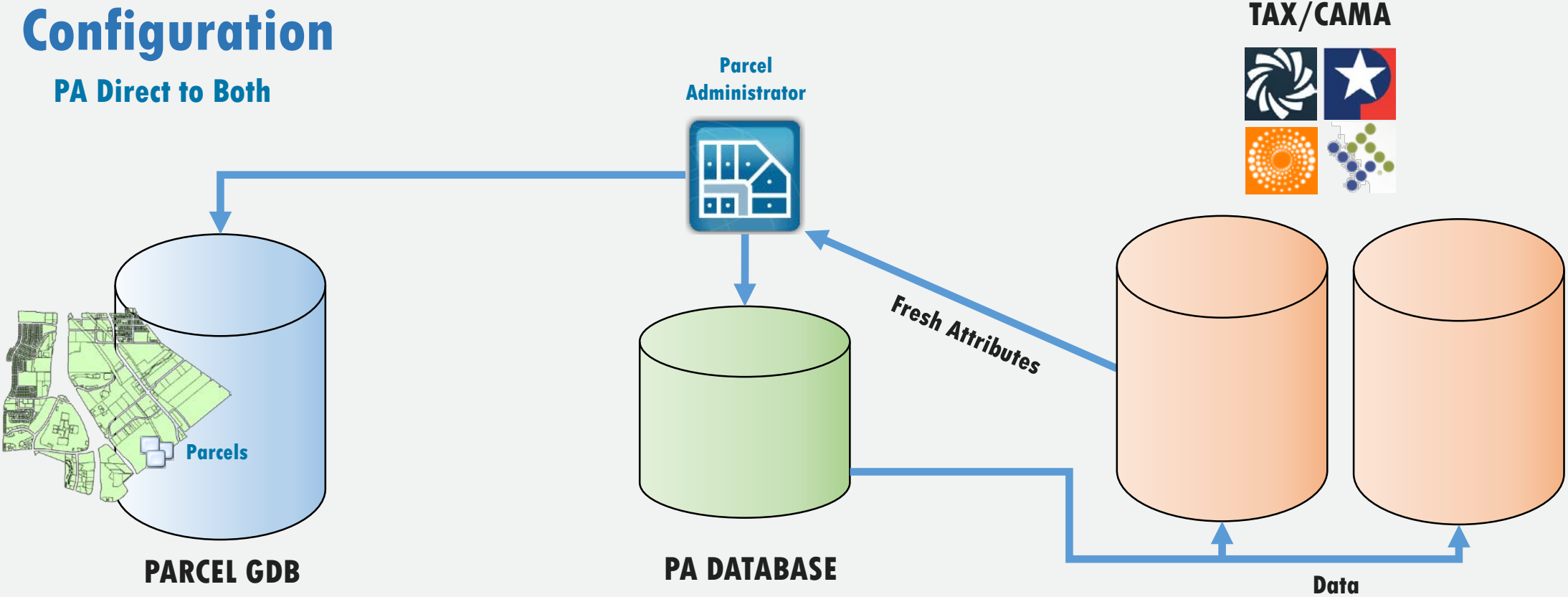
PA to One System



Workflows

Configuration

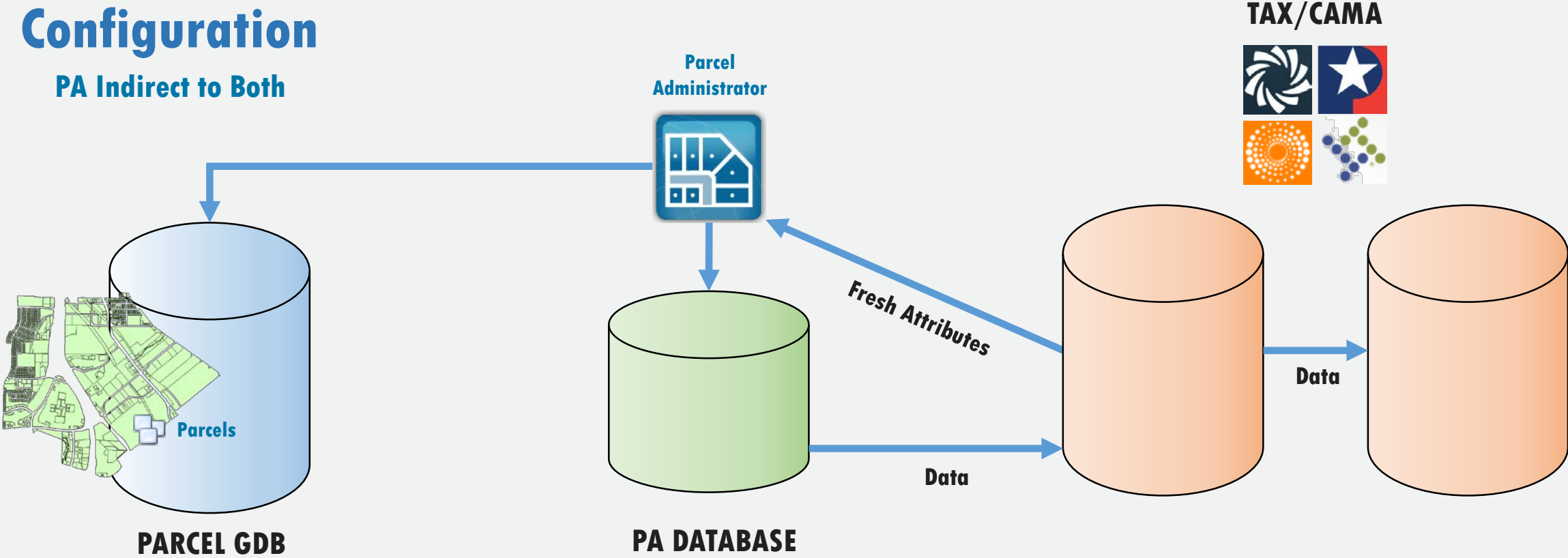
PA Direct to Both



Workflows

Configuration

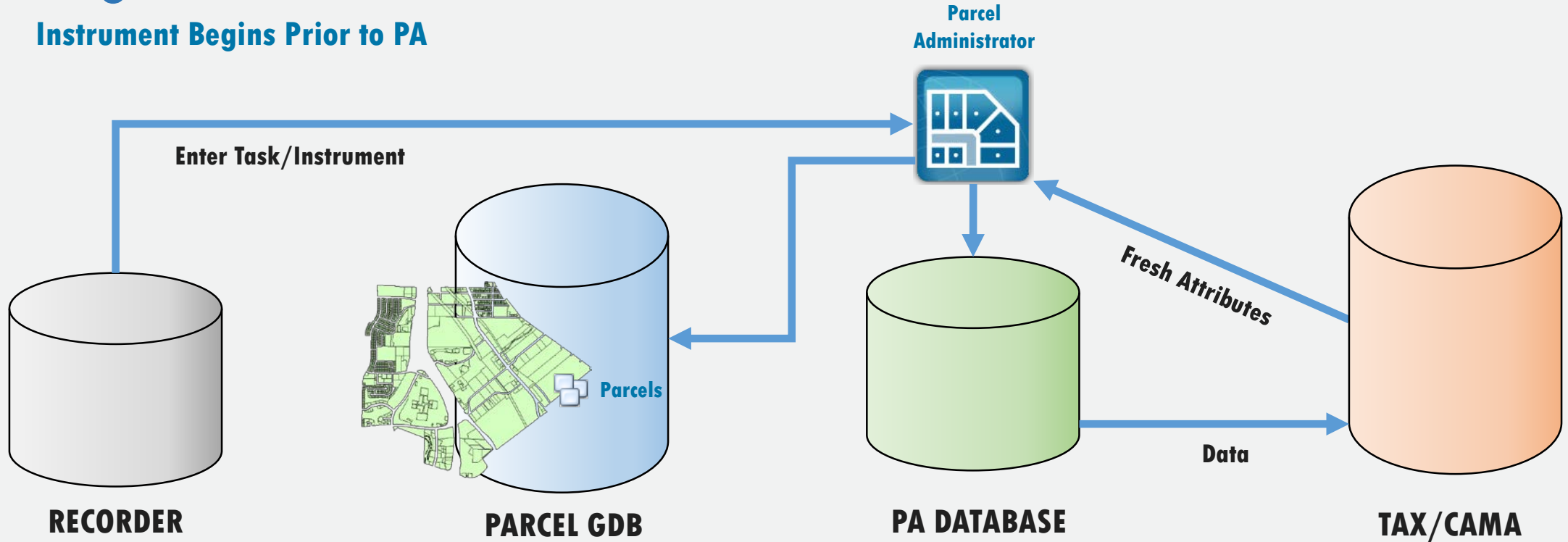
PA Indirect to Both



Workflows

Configuration

Instrument Begins Prior to PA



Data Entry Points

- **Tasks - Instrument**
 - Usually handled by PA, can originate from recorded
- **Transactions - Triggers**
 - Always handled by PA / where new numbers are created
- **Attributes**
 - Put attributes in at one place, configure software to accept and process attributes from outside
 - Send in simple transaction data (PINs) and let the tax system do what it does to proportion attributes and values

Data Entry Goals

- **Reduce Duplicate Entry**
 - **So much data is entered twice!**
- **Do manual entry in as little places as possible**
 - **Even if only once, try to have it all done in one place**
- **Minimize customization**
 - **This is almost always necessary**

Data Import/Export Methods

As varied as the number of Tax/CAMA systems

- **Pushing Transactional Data**
 - **Goes from PA to Tax/CAMA**
 - **Use of web services (iasWorld, GRM, RealWare)**
 - **Validates data, accept/reject, process in Tax/CAMA**
 - **Custom XML generator that scans swap table, grabs new entries, formats XML, sends into system**
 - **Use of custom system-specific tool to send directly in**
 - **ProVal, Vanguard**

Data Import/Export Methods

As varied as the number of Tax/CAMA systems

- **Pushing Transactional Data**
 - Use of SQL Server to directly modify the assessment db
 - Triggers and stored procedures
 - Hamilton County – Patriot
- **Pulling Transactional Data**
 - Swap Table Widget (Ascend)
 - Flat File Interaction (AS400)

KGIS

Integration with GRM (now Augmentum)

- **Active for several years**
- **Uses web services and Sidwell Integration Manager**
- **XML's created and sent into the system**
- **Management of 20+ attributes**
- **Also integration with GIS and addressing**
 - **Captures address in GIS / spatial overlay with parcels**
 - **Sends address into tax system as a modify**

Hamilton County

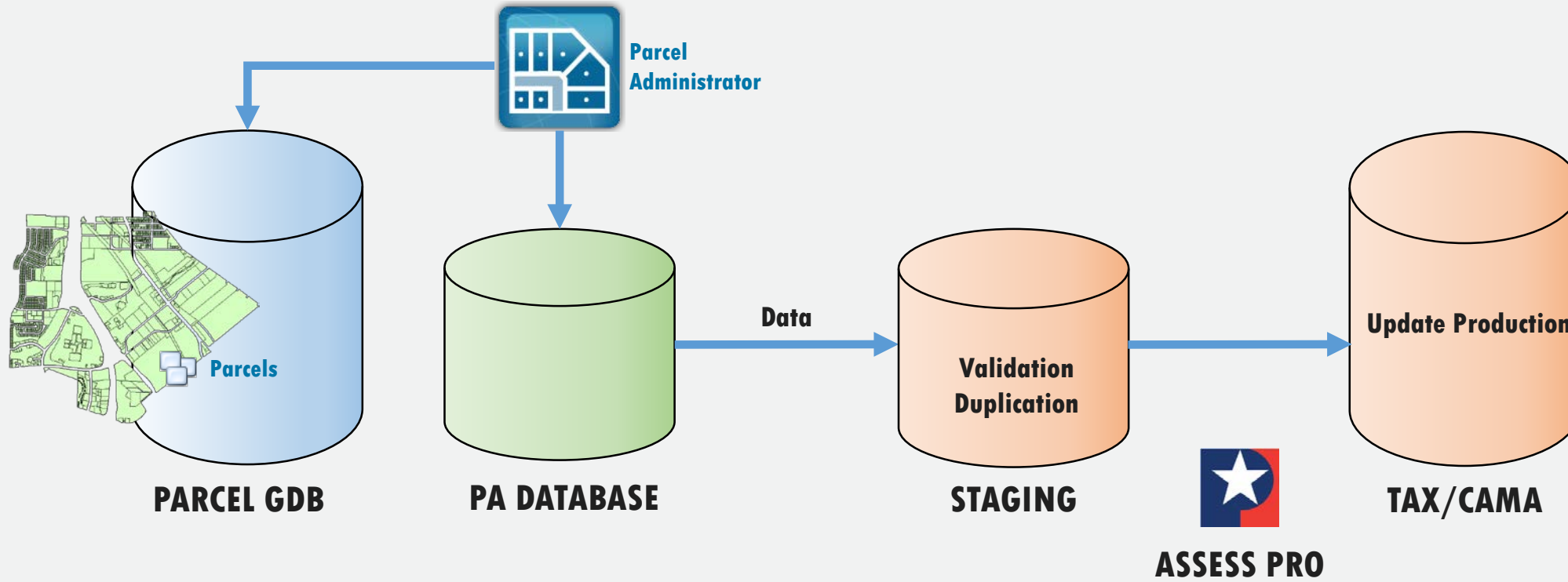
Integration with Patriot (AssessPro)

- **Active since 2013**
- **Uses SQL triggers and stored procedures to validate, stage, and modify the AssessPro database directly**
- **Only sends in parent and child PIN's**
- **SQL makes copy of parent attributes for each child**
- **Data entry makes updates to the child parcels**
- **Required some tweaks along the way (support)**

Workflows

Configuration

Hamilton County



Challenges

What we have learned over the years

- **COORDINATION!**
- **Requires a champion at the county/city**
- **Patience**
- **Nothing is 100% off-the-shelf**
- **Integration can be what you need it to be**



THANK YOU

Van O'Brien | Director of Solutions and Services

St. Charles, Illinois

Office: 630-549-1031 | Cell: 815-762-6735

Erin McCormick | Southeast Regional Account Manager

Clearwater, Florida

Cell: 727-482-2136

www.sidwellco.com