

Trestle[™] 5.0 Release Notes

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Overview

CoreLogic is excited to announce the release of Trestle Version 5.0! This marks the next step of Trestle's evolution toward being the industry's leading distribution platform for all kinds of Real Estate and Property-related data.

In partnership with CoreLogic's Smart Data Platform team, Trestle now offers two internal CoreLogic products: CLIP[™] and Public Record Data. In addition, our new developer's API documentation website brings a whole new level of support to Trestle's data consumer customers.

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New Features

CLIP™

Trestle 5.0 features a new CoreLogic data product called CLIP™: <u>C</u>oreLogic Integrated <u>P</u>roperty Number.

CLIP is a 10-digit numeric value that uniquely identifies real properties. The goal is to provide a unique CLIP for every property in the United States.

CLIP began as a tool for CoreLogic's internal use to associate property content across all our data sets. When CLIP's value for the market as a whole became clear, we decided to release it for general public consumption, with minimal restrictions on its use and redistribution.

Uses & Benefits

CLIP has numerous potential uses and benefits, including:

- De-duplication of property records (e.g., in overlapping MLS territories)
- Increased hit accuracy and joining of a property's data across CoreLogic data sets
- Authoritative property and listing history; lifecycle insights
- Fast lookup of property data
- and more

Technical & Implementation Details

Listings in Trestle are assigned their CLIP as they are refreshed from the MLS source. For now, we are populating records with CLIP values as they organically update from the MLS rather than forcing a full dataset refresh. This means that population of CLIPs will grow over time.

CLIP values are being populated into Trestle's Property resource without updating the modification timestamps. This enables Trestle data consumers to choose how they will gather CLIP values, whether with a total refresh, a pull that updates just that field, or on demand as needed for specific listings.

Broker and Technology Provider Users will be required to accept an updated click-through Trestle Terms of Use agreement on the Trestle dashboard. The new CLIP terms are all that is changed in the update.

Frequently Asked Questions

Where else is CLIP used?

Trestle is the first CoreLogic offering to contain CLIP. In time, CLIP will be available in all CoreLogic solutions in every industry CoreLogic touches (real estate, mortgage, insurance, tax, etc.). The vision is for CLIP to achieve the same kind of ubiquity as DUNS, VIN, or SSN. As CLIP becomes available in additional CoreLogic solutions and is adopted by other industry participants, it will become an ever more valuable tool for all of us.

Why introduce CLIP via Trestle?

As the largest real estate data distribution platform, Trestle is the perfect vehicle to propagate CLIP to the real estate industry. With hundreds of technology providers pulling up to 35 million listing records each month (and growing), Trestle can ensure the swift proliferation of CLIP in the market.

What about RESO's UPID?

CoreLogic supports RESO's UPID initiative and will continue to do so. CLIP is a very different approach to identifying properties. RESO's UPID derives a property ID from the data in the record itself. CLIP is a persistent unique ID that CoreLogic creates, stores, and assigns when we first encounter and standardize an address.

What makes CLIP different?

Unlike an Assessor Parcel Number (APN) or the RESO Universal Property ID (UPID), CLIP persists over time and can support events like parcel numbers changing, or parcels splitting or merging. CLIP can also be assigned to new properties even if an APN is not available from county assessor's office. As a persistent identifier, CLIP will provide a traceable history of changes to a property across multiple sources.

Can CLIP be redistributed?

We expressly encourage users to redistribute CLIP under the requirement that redistributors pass along CLIP's terms and conditions. CLIP must be redistributed in its original form, and for free. This release note is accompanied by a CLIP Terms and Conditions document for your use.

Why a change in agreements?

CLIP is provided by CoreLogic at no charge and we encourage its broad, free adoption and redistribution. However, CLIP is a registered trademarked solution developed by CoreLogic. We are updating the Terms of Use of Trestle to disallow unauthorized modification of CLIP and/or redistribution of CLIP for profit.

Why does CLIP population vary?

CoreLogic has so far uniquely identified and assigned CLIPs to over 155 Million properties. There are two factors affecting how many listings in Trestle have CLIPs:

- The CLIP is populated into Trestle as the listing is refreshed from the MLS source. For now, we are only populating records with CLIP as they naturally refresh from the MLS, rather than forcing a full dataset update, therefore older listings will be slower to receive their CLIP.
- When an address on a listing doesn't standardize correctly, no CLIP can be assigned. We have upcoming enhancements planned improve the standardization hit rate, and thereby boost the CLIP population.

Why is CoreLogic providing this to the market?

Uniquely identifying properties is one of the Hard Problems of our industry. The massive scope of our data gives us a unique vantage point from which to craft a solution like CLIP. At the same time, such a valuable tool only increases in value with more widespread adoption. We're glad that we can help resolve a problem that we have all struggled with as an industry.

Public Record Data

Overview

Trestle 5.0 contains the first release of the CoreLogic Public Records dataset on the Trestle API.

This release includes the resources **PropertySearch** and **LastMarketSale**. In our next several releases we aim to release (roughly in this order):

- PriorSale
- OwnershipChange
- Owner
- Buildings
- Site
- Location
- TaxAssessment

Technical & Implementation Details

Public Records Data is being exposed on the WebAPI interface only. It will not be accessible over RETS.

Providing Public Records via Trestle's WebAPI interface means that the entire suite of API query tools are available, and that you can do everything with the Public Records resources that you are used to doing with MLS data—realtime query, data replication, synchronizing data sets, etc.

In addition, you can use the WebAPI "\$expand" function to join the records about individual properties across both data sets. For instance:

/odata/Property?\$filter=ListingKey eq `29144912'&\$expand=PublicRecordPropertySearches

More details about Public Record-specific queries will be available soon on the developer support website.

Public Records are presently available only to Technology Provider user types inside Trestle. Broker accounts cannot currently be configured for Public Records access. This could potentially be added in the future, and we request your comments about the need for it. In the meantime, Brokers should create an additional account as a Technology Provider to access these resources.

Pricing & Purchasing

Because the terms and pricing of Public Records are very specific to each customer's exact data needs, we are handling that outside Trestle at this time. Please contact the sales rep who manages this data set: Linda Wendt, <u>lwendt@corelogic.com</u>. She'll be happy to work with you to design access to exactly the data you need.

We will be scheduling a Webinar to introduce you to this new product in more depth, so please keep an eye out for that.

New Support Site

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Trestle 5.0 includes an entirely new developer support website.

The new support site is at <u>http://trestle-documentation.corelogic.com</u>.

This is a big step forward in Trestle's documentation. The new site's platform allows for easy, flexible expansion and enhancement, which means you'll see the support site grow and evolve and become ever more useful over time.

Corelogic TRESTLE WEBAPI V RETS V METADATA						
Q Search Getting Started Introduction	Getting Started	http csharp	java go		Î	
Reading the Metadata Retching Property Data Retching Media Pagination Quotas and Limits Errors Sign-up for Trestle	Trestle's Web API is based on and compliant with the <u>RESO Web API</u> standard and the <u>RESO Data Dictionary</u> standard. The RESO Web API standard is based on <u>OData</u> and provides a unified way to access data across multiple platforms. Features of Trestle's Web API that extend RESO's standard are called out and highlighted. If you do not already have a Web API feed set up, Trestle offers a <u>sample feed</u> for you to use to get acclimated to the API and its responses. You may also be interested in the <u>RETS documentation</u> if you are not ready for Web API. Below, we will demonstrate how to set up a basic Trestle client that replicates property data and media. You will learn how to authenticate using OAuth2, how to fetch the metadata to learn what data you can get, how to fetch the property data and the related media files, as well as a few					

The site features code samples for many key Trestle concepts, in several popular languages.

	EBAPI 🗸 🛛 RET.	S 🗸 🗏 METADATA	
Search Getting Started Introduction Authentication Reading the Metadata Fetching Property Data Fetching Media	In order to do anything in Trestle, you must first be authenticated. Trestle's Web API uses an <u>OAuth2 Client Credentials</u> flow for authentication. Once you have obtained a token, it is good for up to 8 hours. We recommend caching the token and its expiration and refreshing it only when necessary. A successful authentication request will return a JSON object with three values:		<pre>http csharp java go String content = Request: Post(uri).bodyForm(Form.form() .add("client_id", client_id .add("client_scret", client_scret) .add("scope", "api") .add("grant_type", "client_credentials") .build()).execute().returnContent().aSString(); OAuth2Token token = new Gson().fromJson(content_OAuth2Token.class);</pre>
Pagination Quotas and Limits Errors Sign-up for Trestle	Property access_token expires_in	Description This is the authorization token that you will pass in the Authorization header in subsequent requests. This value indicates how long the token is valid for, in seconds. As of now, it will always be 28880. This value indicates what kind of token is being returned. As of	Make sure to replace <client_id> and <client_secret> with your client id and secret. You will get a JSON response like this:</client_secret></client_id>
		ken you get will be usable for 8 hours. You can request a new quently if needed.	<pre>"access_token": "ey30eXAi0i3KV1QiLC3hbGci0i3SUzI1Ni3wQ3VBA", "expires_in": 28800, "token_type": "Bearer" }</pre>

The new dynamic metadata explorer gives you a deep dive into the details of Trestle's data payloads, including links to the RESO Data Dictionary wiki for more about the standards we support.

CoreLogic TRESTLE W	ebapi 🗸 Rets 🗸 Metada	TA			
Q Search Resources	Resources				
Property CustomProperty PropertyRooms	Property	Property			
PropertyUnitTypes Office	Field	Туре	Size	Description	
Member	AboveGradeFinishedArea	Decimal	14.2	Finished area within the structure that is at or above the surface of the ground.	
Media OpenHouse	AboveGradeFinishedAreaSource	AreaSource Enum		The source of the measurements. This is a pick list of options showing the source of the measurement. i.e. Agent, Assessor, Estimate, etc.	
Realtor Enumerations	AboveGradeFinishedAreaUnits	AreaUnits Enum		A pick list of the unit of measurement for the area. I.e. Square Feet, Square Meters, Acres, etc.	
	AccessCode	String	25	If the property is located behind an unmanned security gate such as in a Gated Community, what is the code to gain access through the secured gate.	
	AccessibilityFeatures	AccessibilityFeatures Enum		A list or description of the accessibility features included in the sale/lease.	
	AdditionalParcelsDescription	String	255	If additional parcels are included in the sale, a list of those parcel's IDs separated by commas. Do not include the first or primary parcel number, that should be located in the Parcel Number field.	
	AdditionalParcelsYN	Boolean		Are there more than one parcel or lot included in the sale?	

Feature Enhancements

MLS can now configure which data feed types are available to Brokers

In the MLS dashboard, inside the "Data" menu item, in the details for a particular feed type, see the following in the "Details" tab:

Data Feed: IDX (RETS Delivery)				
Details Fees Contracts	Customize Data			
Data Feeds can be enabled or disabled. If	a Data Feed is disabled, it is disabled for all Technology Providers.			
DATA FEED ENABLED:	• Yes O No			
HIDDEN FROM TPS:	○ Yes ♥ No			
HIDDEN FROM BROKERS:	○ Yes ♥ No			
DATA FEED DESCRIPTION:	RETS IDX Data Feed that supports the latest RESO Data Dictionary standard. Includes OnMarket listings.			

Using these controls, you can now selectively hide specific feed types from showing up in TP and Broker connection request interfaces. Previously only visibility to TPs was configurable on this screen, but you can now set up separate sets of feeds for your vendors and your brokers.

Capturing and reporting comments on suspended connection

When the MLS (or a CoreLogic Admin impersonating an MLS) suspends a data connection, the system will now prompt for an optional comment about the reason for the suspension.

Connection Deta	ils Product Deta	ls Fees	Contracts	Messages
d c	ata and may uni	ntentionally	disrupt prod	ill prevent this technology provider's product from accessir duction websites, services, applications and / or infringe o ogy provider. Please confirm before suspending this
			COMMENT TO INCL	LUDE IN NOTIFICATION (OPTIONAL):
		Suggest you co back. Until the	ntact the bank to	XXX3984 has been declined by your bank. o get it marked as paid off and then email us in will be suspended.

Later the Connection Details screen for this connection will report both this explanation, and the user who issued the suspension.

Technology Provider Connection	on Details: RESO Cert
Connection Details Product Deta	ails Fees Contracts Messages
TECHNOLOGY PROVIDER :	RESO Cert
PRODUCT NAME :	RESO Data Dictionary Certification Tool
DATA FEED :	QA RETS Certification
DELIVERY METHOD :	RETS
CONNECTION STATUS :	Suspended as of 4/9/2020
SUSPENDED BY :	myMLO
SUSPENSION COMMENT :	Looks like you card ending in XXXX3984 has been declined by your bank. Suggest you contact the bank to get it marked as paid off and then email us back. Until then your connection will be suspended Chief MLO Billing assistant
EFFECTIVE DATE:	

This will improve transparency and traceability around suspended connections. The "Suspended By" and "Suspension Comment" will be visible to both the MLS and the TP users and should be considered public content.

Your Feedback Wanted

We're eager to hear your thoughts about this release. Your feedback is a key factor in setting product priorities, so hearing from you is very important to us!

Feel free to reach out at any time with feature requests, bug reports, or any other idea that would make your business more productive or easier to operate!



Your contact for feedback on Trestle is:

Dan Ray Principal, Technical Product Manager daray@corelogic.com

Thank you!