ONESOURCE™
US TAX INTEGRATION FOR SAP S/4 HANA CLOUD

INTEGRATION USER GUIDE

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ONESOURCE US TAX INTEGRATION FOR SAP S/4 HANA CLOUD

With this new SOAP based Integration, a new User Interface is provided whereby you will be able to maintain all Integration Configuration items, set up your logging preferences and access logs to analyze what taxes are calculated and why. Within this section, the following feature is described in detail:

- Integration Configuration Setup

- Additional Information for Integration Configuration for SAP

- Mapping a Determination Company to a SAP Company Code

- Configuring Logging Options

- Roles

INTEGRATION CONFIGURATION SETUP

To maintain settings for the Integration Configuration, login to the OneSource Tax Integration for SAP. Navigate to the Configuration tab and choose Integration Configuration.

The table below lists all integration parameters to be maintained in the Integration UI and their usage:

ATTRIBUTE	DESCRIPTION
Product Code for Freight	Default product code used in Determination to determine freight taxability; this entry must match the freight product code entry in ONESOURCE Indirect Tax. The default code used in FREIGHT.
Remove Leading Zeroes	Enables removal of leading zeros. If set to TRUE, leading zeros will be removed in fields marked as such in LEADING ZEROS NOTE: This setting is for backward compatibility only and should not be changed from FALSE unless you are instructed to do so by ONESOURCE Indirect Tax Support.
Use Unrounded Amount	If is_rounded set to TRUE (default), the value will be the document rounded amount from the output XML.If is_rounded set to FALSE, the value will be the document un-rounded amount from the output XML.NOTE: If you removed the is_rounded property, the value will be set to is_rounded = false.This is used to calculate ONLY the effective tax rate that is returned to SAP. It does not affect the tax amount.

ATTRIBUTE	DESCRIPTION
Maximum Records Displayed (for Jurisdiction Pop Up)	Limits the number of address records returned by the jurisdiction lookup. Default is set to 99 as this is the maximum SAP can return on the screen.
Raise Error When Maximum Records Reached (for Jurisdiction Pop Up)	Setting to control if error message should be raised when max_jurisdiction_addresses is reached (FALSE), or if instead the max number of addresses specified should be returned (TRUE). The default is FALSE.
Only Matching County Records (for Jurisdiction Data Returned)	Controls check of state address attribute returned by ONESOURCE Indirect Tax during jurisdiction determinationagainst SAP submitted value. If set to TRUE only matching entries will be returned. The default is FALSE.
Only Matching City Records (for Jurisdiction Data Returned)	Controls check of state address attribute returned by ONESOURCE Indirect Tax during jurisdiction determination against SAP submitted value. If set to TRUE only matching entries will be returned. The default is FALSE.
Override SAP County with Returned Value (for Address Overrides)	If set to TRUE then value returned by ONESOURCE Indirect Tax address validation servlet will override the value supplied by the address master record. If set to FALSE then the value is not changed. The default is TRUE.
Override SAP City with Returned Value (for Address Overrides)	If set to TRUE then value returned by ONESOURCE Indirect Tax address validation servlet will override the valuesupplied by the address master record, unless the value is UNINCORPORATED. In that case, the SAP value will not beoverwritten. If set to FALSE then the value is not changed.This parameter applies to the US only. The default is FALSE.

ADDITIONAL INFORMATION FOR ONESOURCE US TAX INTEGRATION FOR SAP S/4 HANA CLOUD

Before you configure the integration configuration, please review for:

- Leading Zeros

- Freight Lines and Product Lines

- Jurisdiction Determination

- Address Mapping

LEADING ZEROS

ONESOURCE Indirect Tax Determination maps SAP data without removing leading zeros.

Therefore, if you set up TransEditors, Customers, Exemptions, Products, or other master data in ONESOURCE Indirect Tax, you should set them up with the leading zeros.

Alternatively, you can set the *Remove Leading Zeroes* parameter in the Integration Configuration to TRUE, which will remove leading zeros for the following elements:

- MAT_NR: Material Number

- PROD_CODE: Product Code

- GROUP_PROD_CODE: Group Product Code

- ACCNT_NO: Customer Number or Vendor Number depending upon APAR_IND

- ACCNT_CLS: General ledger account

- COST_OBJECT: Cost center or other cost object (order, etc)

- EXCERTIF: Exempt Certificate Number (Not normally used)

FREIGHT LINES AND PRODUCT LINES

When freight is a condition in the pricing procedure for a line item in SAP, certain fields on the product line are copied onto the freight line created by Integration. This copying process makes the freight line identical to the product line with the exception of the following fields:

- RELATED_LINE_NUMBER: The value of this field is set to the value of the parent line number.

- DESCRIPTION: The value of this field is "Freight for line xx" where xx is the line number from the parent line.

- GROSS_AMOUNT: The value of this field is set based on SAP field value FREIGHT_AMT.

- LINE_NUMBER: The value of this field is the line number of parent line filled to the sixth position with leading zeros and a one (1) added in front, for example, 10 will be 1000010.

- PRODUCT_CODE: The value of this field is set from the Product Code for Freight in the Integration Configuration screen.

JURISDICTION DETERMINE

Jurisdiction Codes are retrieved from ONESOURCE Indirect Tax during the creation or change of any master record that has an address. A SOAP call from the SAP Tax Interface System is then made to the addressvalidation servlet which evaluates the Zone Tree. The results are sent back to SAP through the SAP Tax Interface System in the form of a Jurisdiction Code.

The Jurisdiction Code is stored on the SAP master record. The SAP Jurisdiction Determination function calls the servlet to find the most accurate jurisdiction, given the information in the transaction.

For United States of America:

ONESOURCE Indirect Tax does not store every ZIP Plus 4 (Geocode) in the United States. It only stores Plus 4 data that affects taxability. The return behavior of the addressvalidation servlet depends on whether 5-digit ZIP or 9-digit ZIP Plus 4 information is sent.

If only 5-digit ZIP information is sent to the servlet, all possible jurisdiction choices are returned to SAP so you can determine the appropriate address for the master data record. The default zone is always the first record returned.

If ZIP Plus 4 information is sent to the servlet, it always returns only one jurisdiction code to SAP:

• If ONESOURCE Indirect Tax stores the Plus 4 value, only one Jurisdiction Code is returned.

• If ONESOURCE Indirect Tax does not store the Plus 4 value, the Jurisdiction Code returned represents ONESOURCE Indirect Tax default zone for that area. This is always the correct zone.

NOTE: ONESOURCE Indirect Tax strongly suggests sending ZIP Plus 4 address information for best tax accuracy.

CITY/COUNTY MATCHING LOGIC

Integration for SAP has four configuration parameters that support matching for United States of America transactions only. These parameters assist in data consistency and provide additional benefits when evaluating the Zone Tree. The parameters are:

- city_flag

- override_supplied_city

- county_flag

- override_supplied_county

city_flag: If the parameter is set to TRUE, an address returned by ONESOURCE Indirect Tax is discarded if the city name does not match the city name in the address provided by SAP. If ONESOURCE Indirect Tax returned one or more addresses, but they were discarded because of city name matching, an error is returned to SAP. A null value supplied by SAP always matches a value returned by ONESOURCE Indirect Tax, regardless of the string match setting.

NOTE: The city UNINCORPORATED always matches, even if the city_flag is set to TRUE. If the flag is set to FALSE, no matching is performed between ONESOURCE Indirect Tax Determination cities and SAP provided cities.

override_supplied_city: IF set to FALSE, then the value supplied by SAP is returned; if set to TRUE the value returned by the address validation servlet is used, unless the value is UNINCORPORATED. In that case, the SAP value will not be overwritten. Default is FALSE.

county_flag: If the parameter is set to TRUE, an address returned by ONESOURCE Indirect Tax Determination is discarded if the county name does not match the county name in the address provided by SAP. If ONESOURCE Indirect Tax returned one or more addresses, but they were discarded because of county name matching, an error is returned to SAP. A null value supplied by SAP is not evaluated for a match. If the flag is set to FALSE, no matching is performed between counties and SAP provided counties.

override_supplied_county: If the parameter is set to FALSE, the county supplied by SAP is returned. A null value from SAP will not return a value to SAP. If the parameter is set to TRUE, the county found in ONESOURCE Indirect Tax Determination Zone Tree is returned to SAP and the address is supplemented with that information. If county_flag is set to TRUE, the value supplied by SAP is the value returned by Determination.

TAX JURISDICTION CODE BREAK-DOWN

UNITED STATES STRUCTURE			
	TAXJCD_L1	**TAXJCD_L2**	**TAXJCD_L3**	**TAXJCD_L4**
USA	Country & State (4)	Zip Code (5)	Location (4)	Indicator (1)
	USNY	14744	8703	0
	The two character country code and two character US state combined.	The five digit US zip code.	The four digit US Plus 4 data. *If null, ONESOURCE Indirect Tax changes to XXXX as a placeholder.	This indicator denotes whether the address is located within or outside city limits. 0 = incity, 1 = out of city.

MAPPING A DETERMINATION COMPANY TO A SAP COMPANY CODE

(a) In SAP CPI

For each transaction passed to Determination, the XML element tag <EXTERNAL_COMPANY_PREPEND> is appended on the Input XML.

This prepend uniquely defines a company in Determination in order for its rules, rates and other processing logic to be applied in Determination.

Integration will take the value from this tag <EXTERNAL_COMPANY_PREPEND> and concatenate it with the SAP company code to form the external company ID in Determination.

```
Example:

SAP Request XML

<EXTERNAL_COMPANY_PREPEND>123456789_</EXTERNAL_COMPANY_PREPEND>

Determination Request XML

<EXTERNAL_COMPANY_ID>123456789_1710</EXTERNAL_COMPANY_ID>
```

To setup the External Company Prepend for the input XMLs, see the **ONESOURCE Tax Integration for SAP (US) iFlow Configuration Guide**.

(b) In the Integration UI

Here, setup the External Company Prepend for your tenant. From the OneSource Tax Integration For SAP UI, navigate to the Connectivity Settings button.

Enter the same external prepend configured in your SAP CPI setup, and save your entry.
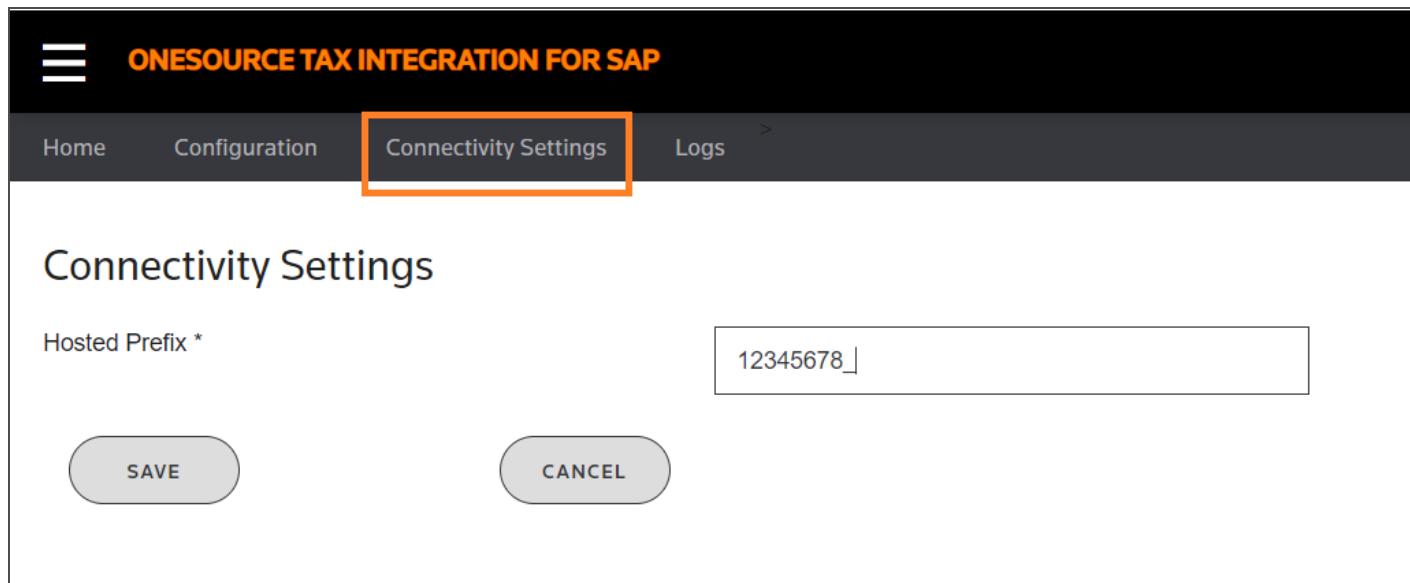
(c) In Determination

It is required that the External Company ID in Determination is configured to match the value of the External Company Prepend in both SAP CPI and the Integration UI.

CONFIGURING THE ONESOURCE IDT URL

Here, you will be able to configure the ONESOURCE IDT URL. From the OneSource Tax Integration for SAP UI, navigate to the Connectivity Settings button.

Enter the ONESOURCE IDT URL to connect to Determination and save your entry.
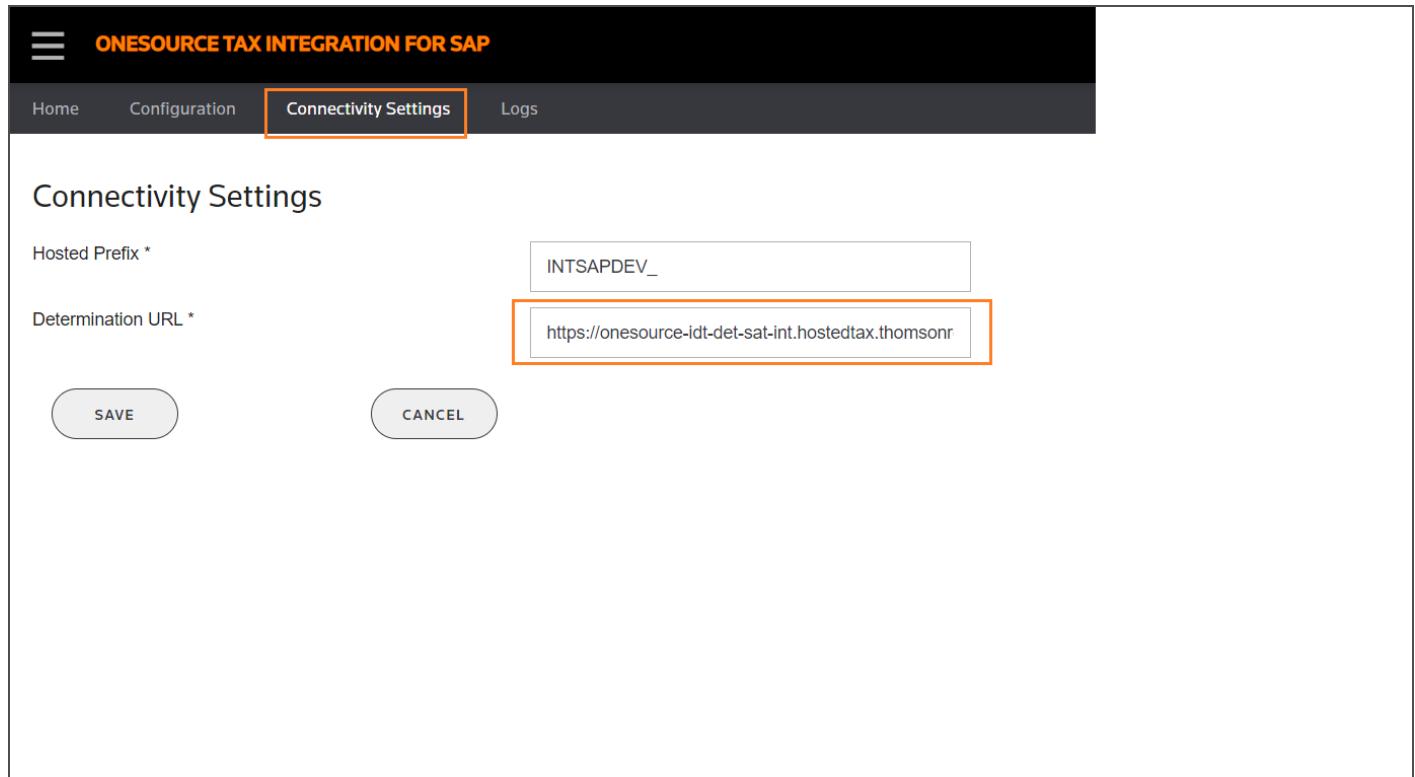
CONFIGURING LOGGING OPTIONS

The Logger allows the information passed between SAP and Integration to be captured in log records to be later viewed for process debugging. The logs will show the following information:

- Data passed from SAP to Integration (SAP Request logs),

- Data passed from Integration to Determination (Determination Request logs)

- Data passed from Determination to Integration (Determination Response logs); and

- Integration the data passed back to SAP (SAP Response logs) which includes system error messages helpful in problem solving.

Based on the company code, the user with the Integration Role *Configurator* will be able to add or delete the logs for each Integration client instances.

To enable logging, log into the *ONESOURCE Tax Integration For SAP UI*. Navigate to the page **Log Configurations** under the tab Configuration.
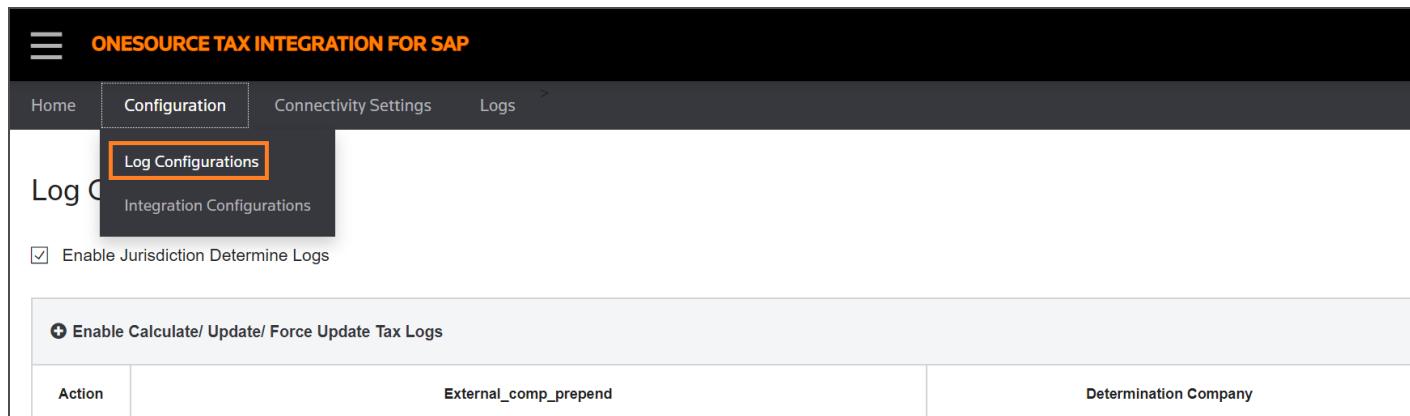
Here you have options to enable logging for

- Jurisdiction Determine logs

Click on the checkbox "Enable Jurisdiction Determine Logs" to enable logging for any tax jurisdiction determination for master data (e.g. business partners, cost centers, WBS elements) or organization objects (plant). Logging will be enabled at client level for all companies subscribed under this tenant.

- Calculate/ Update / Force Update Tax log

Click on the "Enable Calculate/ Update/ Force Update Tax Logs" pushbutton. This will take you to a separate page to select the companies you want enabled for logging of the logs for the Calculate/ Update/ Force Update endpoints.

Save your settings.
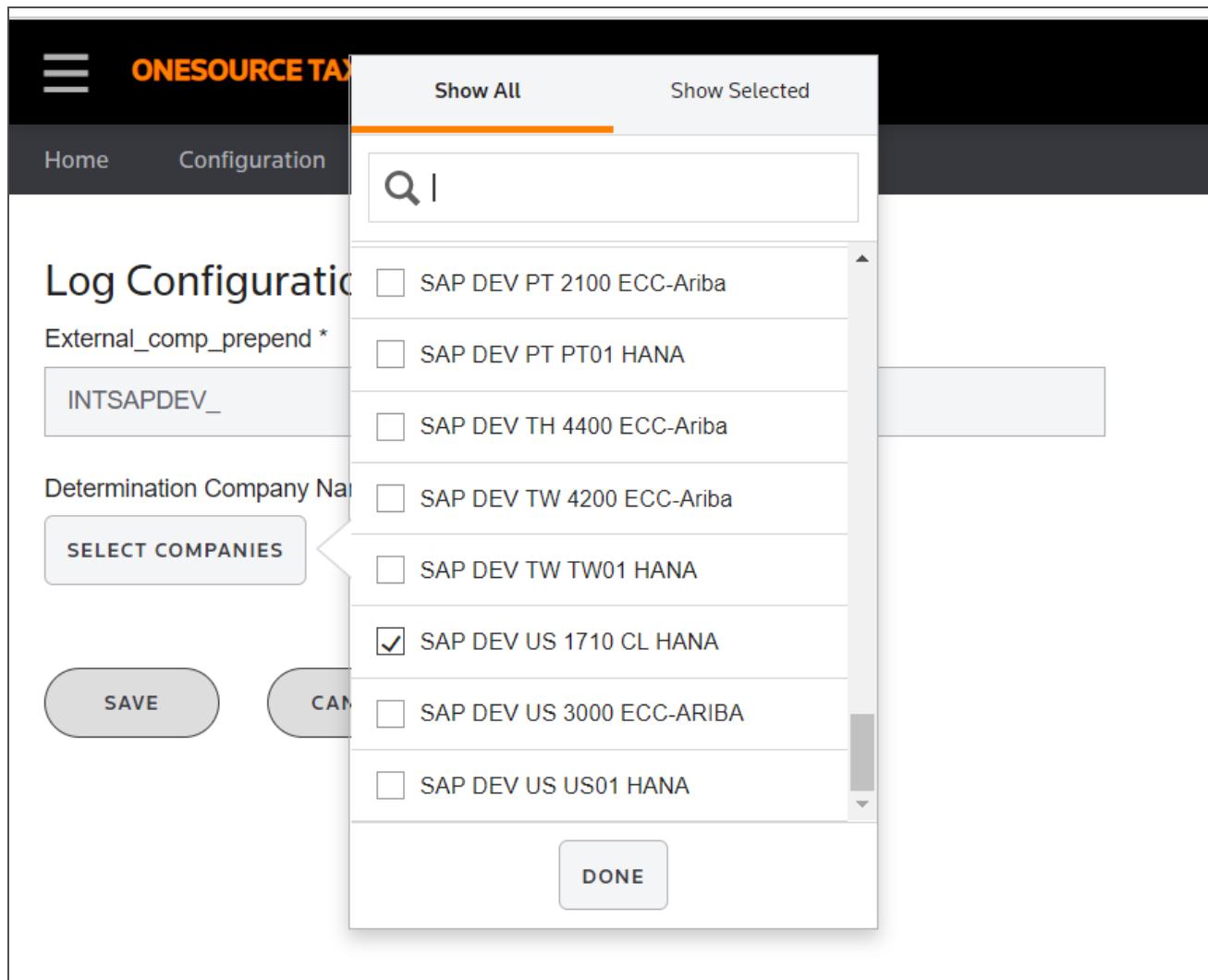
Note: Logs will be kept on the Integration database for 30 days. If you need to access specific transaction logs, always download a copy of the logs to your local machine.

USER ROLES AND PERMISSIONS

Listed below are the Integration Roles provided and their respective permissions:

ROLE	DESCRIPTION	CLIENT/COMPANY SPECIFIC	WEB PAGES ACCESS			
			CLIENT SETUP	LOG SETTINGS	API/CUSTOM MAPPING SETTINGS	LOG SEARCH
Administrator	This user setups up New Clients for integrations. For example: Setting the external_company_ prepend.	All Clients	EDIT	EDIT	EDIT	READ ONLY
Configuration	User who is responsible for configuring client or company specific settings for Integration.	CLIENT SPECIFIC	READ ONLY	EDIT	EDIT	READ ONLY
User	User who is responsible to analyze logs and require access to view Integration settings.	CLIENT SPECIFIC	READ ONLY	READ ONLY	READ ONLY	READ ONLY