### **HANA-ABAP Tutorials - ресурсы**

**CDS Part 1. Core Data Services – Introduction**

<https://sapyard.com/abap-on-sap-hana-part-iv/>

Technically CDS is an enhancement of SQL which provides a data definition language - DDL for defining CDS entities - database tables/views and user-defined types in the database. The enhancements include

1. ***Annotations*** - is a line of code that starts with an @ sign.
2. ***Associations*** - replacing joins with simple path expressions in queries.
3. ***Expressions*** - for calculations and queries in the data model.

CDS view

* ismanaged by the ABAP data dictionary*.*
* During activation a database view is created on the HANA layer - yet only the ***ABAP CDS view*** has to be transportedvia the ABAP Change and Transport System - CTS.
* Basically - is an entity that can be addressed by its name -
* in ABAP as a TYPE
* in Open SQL as a DATA SOURCE.

In an upcoming release the direct access to the DB view of a CDS view will be declared as obsolete ⇒ not to use them if it can be avoided.

For evaluating the *semantic properties* - **annotations** of a CDS View /stored in system tables/ we should use an appropriate API /CL\_DD\_DDL\_ANNOTATION\_SERVICE if available in your system/.

CDS view is a *fully fledged* (полноценный; fledʒ оперять-ся) data model which can be used even by applications outside of the SAP domain.

**How can we find all CDS views in SAP?**

Check the table **TADIR** in SE16; **PGMID** = ‘R3TR’, **OBJECT** = ‘DDLS’ - here we find all DDL sources and the package of each source in column DEVCLASS. Knowing the package we can use ADT to find the DDL sources in ADT. The CDS entities - value **STOB** in column OBJECTTYPE defined therein as well as the names of the generated database views - value **VIEW** in column OBJECTTYPE.

**Also read**

[Create you first SAPUI5 App and Consume a Custom OData Service without any code](https://sapyard.com/sapui5-tutorial-part-i-how-to-consume-custom-odata-in-sapui5-application/).

# CDS Part 2. Core Data Services – Deep Dive

<https://sapyard.com/abap-on-sap-hana-part-v/>