# Mapping Software AG IDL to Integration Server Data Types

- All primitive data types of the Software AG IDL (except B and BV) are mapped to `java.lang.String`.

- Only data types B and BV (with or without maximum length) are mapped to `byte[]`.

- With data types N, NU, P, and PU, you have the option to keep or remove leading zeros or the decimal point. Default is to remove leading zeros and to keep the decimal point. This can be configured individually for each adapter service.

- Data types A, K, and U (for fixed length) have the option to keep leading and trailing whitespace characters. Default is to trim these whitespace characters. This can be configured individually for each adapter service.

- Groups are mapped to documents.

- One dimensional arrays are mapped to String lists (`java.lang.String[]`).

- Two dimensional arrays are mapped to String tables (`java.lang.String[][]`).

- Three dimensional arrays are mapped to `java.lang.String[][][]`.

- Data type D: the format of the string in the pipeline is `java.text.DateFormat.getDateInstance(DateFormat.MEDIUM, Locale.ENGLISH).format(date))`, where *date* is of type `java.util.Date`.

- Data type T: the format of the string in the pipeline is `java.text.DateFormat.getDateTimeInstance(DateFormat.MEDIUM, DateFormat.MEDIUM, Locale.ENGLISH).format(date))`, where *date* is of type `java.util.Date`.