

Standard Mapping Languages

- XSLT
- ISO-10303-14

ISO-10303-14 EXPRESS-X

- EXPRESS-X is a structural data mapping language. It consists of language elements that allow an unambiguous specification of a relationship between EXPRESS schemas. The following are within the scope of this part of ISO 10303:
 - mapping of data governed by one EXPRESS schema to data governed by another EXPRESS schema;
 - mapping of data governed by one version of an EXPRESS schema to data governed by another version of that EXPRESS schema, where the two schemas have different names;
 - specification of requirements for data translators for data sharing and data exchange applications;
 - specification of alternate views of data defined by an EXPRESS schema;
 - an alternate notation for application protocol mapping tables;
 - bi-directional mappings where mathematically possible;
 - specification of constraints that may be evaluated against data produced by mapping.

Example mapping

SCHEMA_MAP similar;

```
REFERENCE FROM person_and_org_schema AS SOURCE;
REFERENCE FROM similar_target AS TARGET;
```

```
MAP person_org_map AS
po : person_org;
```

```
FROM
p : person;
o : organization;
```

```
SELECT
po.name := p.last_name;
po.org := o.department_name;
```

```
END_MAP;
END_SCHEMA_MAP;
```

Example view

SCHEMA_VIEW example;

```
REFERENCE FROM source_schema;
```

```
VIEW items_and_persons;
```

```
FROM i : item; p : person;
```

```
SELECT
item_number : INTEGER := i.item_number;
responsible : STRING := p.name;
```

```
END_VIEW;
END_SCHEMA_VIEW;
```