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Referências

[Antoniou & Harmelen, 2004]

Antoniou, G., & Harmelen, F. A semantic Web primer. Cambridge, Mass: MIT Press, 2004.

[Alavi .& Leidner, 1999]

Alavi, M., & Leidner, D. E. Knowledge management systems: issues, challenges, and benefits. Communications of the Association for Information Systems. Volume 1, 1999 Article 7.

[Benbya, Passiante & Belbaly, 2004]

Benbya, H., Passiante, G., & Belbaly, N. A. Corporate portal: A tool for knowledge management synchronization. International Journal of Information Management, 2004, 24(3), 201–220.

[Central Computer & Telecommunications Agency]

Central Computer & Telecommunications Agency - CCTA, Best Practice for Service Support, Information Technology Infrastructure Library – ITIL, the key to Managing IT Services.

[Churchman, 1972]

Churchman, C. W. The Design of Inquiring Systems: Basic Concepts of Systems and Organizations, New York, NY: Bencis Books, 1972.

[D2R Server]

Publishing Relational Databases on the Semantic Web

<http://www4.wiwiss.fu-berlin.de/bizer/d2r-server/>.

[Delone & McLean ,2003]

Delone, W. H., & McLean, E. R. The DeLone and McLean model of information systems success: A ten-year update. Journal of Management Information Systems, 2003, 19(4), 9–30.

[Giachetti, 2004]

Giachetti, R. E. (2004). A framework to review the information integration of the enterprise. *International Journal of Production Research*.

[Grant, 1996]

Grant, R.M. "Prospering in Dynamically-Competitive Environments: Organizational Capability as Knowledge Integration", *Organization Science*(7), 1996, 4, pp. 375-387.

[Gruber, 1998]

GRUBER, T. R. (1993). A translation approach to portable ontology specifications. *Knowledge Acquisition*, 5(2):199–220.

[J. Joo & S. M. Lee, 2009]

Jaehun Joo & Sang M. Lee, 2009, Adoption of the Semantic Web for overcoming technical limitations of knowledge management systems, *Expert Systems with Applications* 36 (2009) 7318–7327.

[TecWeb, Explorator Tool]

A Direct Manipulation Generic RDF Browser and Querying Tool

<http://www.tecweb.inf.puc-rio.br/explorator/>.

[TecWeb, RExplorator Tool]

RExplorator is a tool for exploring RDF data by direct manipulation, as an extension of Explorator. <http://www.tecweb.inf.puc-rio.br/replorator>.

[W3C, N3]

World-Wide Web 1998, An readable language for data on the Web, <http://www.w3.org/DesignIssues/Notation3>.

[W3C, RDF]

World-Wide Web Consortium, 2004, RDF Vocabulary Description Language 1.0: RDF Schema. W3C Recommendation 10 February 2004.

[W3C, OWL]

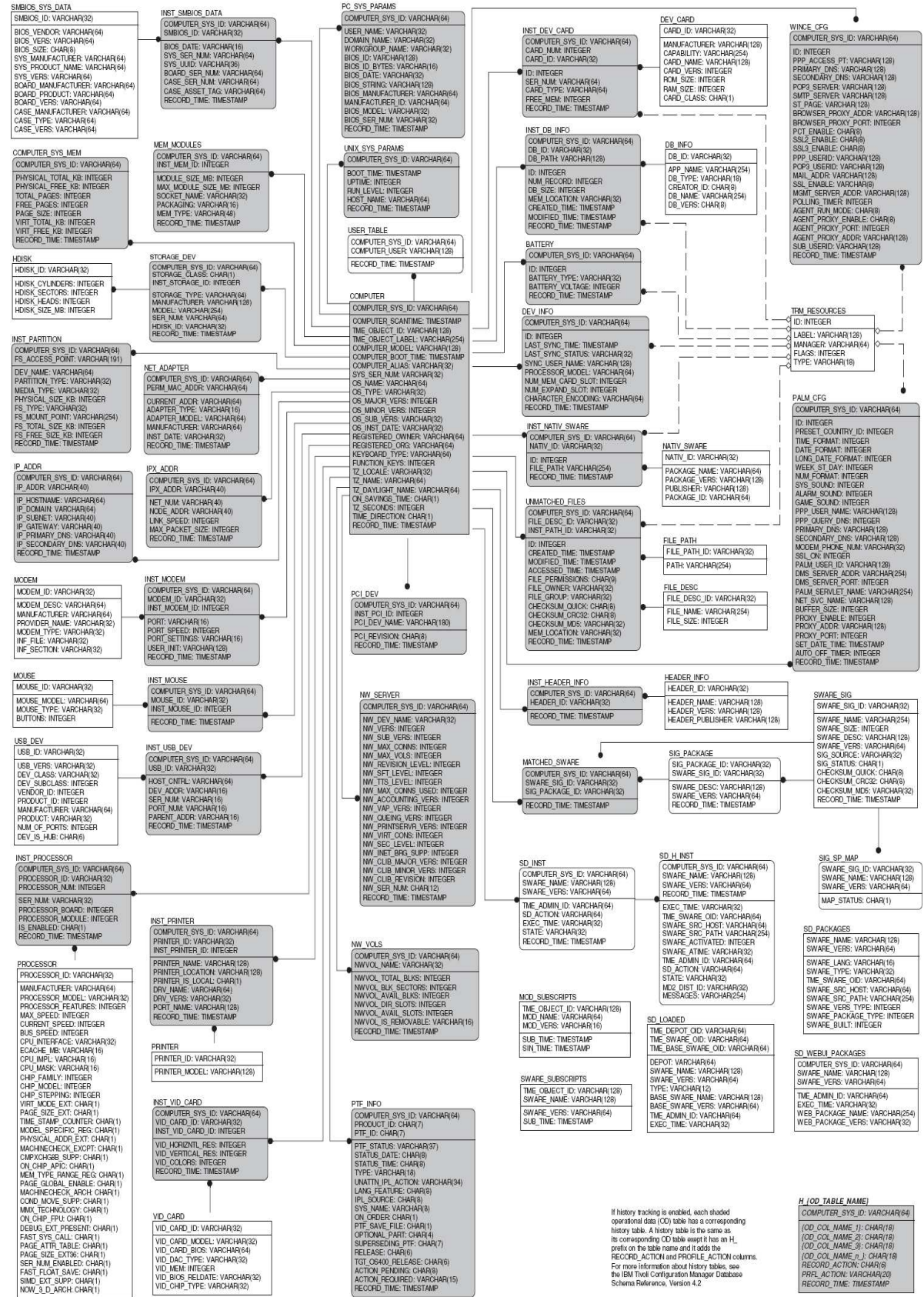
World-Wide Web Consortium, 2004, OWL Web Ontology Language: W3C Recommendation 10 February 2004.

[W3C, SPARQL]

World-Wide Web Consortium, 2008, SPARQL Query Language for RDF: W3C Recommendation 15 January 2008.

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Anexo 1

8.1.Modelo Relacional ITCM



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If history tracking is enabled, each shaded operational data (OO) table has a corresponding history table. A history table is the same as its corresponding OO table except it has an HL prefix on the table name and it adds the RECORD_ACTION and PROFILE_ACTION columns. For more information about history tables, see the IBM Tivoli Configuration Manager Database Schema Reference, Version 4.2

8.2. Modelo Relacional TEC

TEC 3.8 schema for Oracle

*****LEGEND*****

- * AK#.# = alternate key defined
- * IE#.# = non-unique key
- * FK = foreign key defined

* the 1st # is the number of the key
 * and the 2nd # is the order of the
 * column in that key.

TEC_V_CONSOLE_LIST

```

date_reception: tec_t_evt_rep.date_reception
server_hndl: tec_t_evt_rep.server_hndl
event_hndl: tec_t_evt_rep.event_hndl
status: tec_t_evt_rep.status
severity: tec_t_evt_rep.severity
class: tec_t_evt_rep.class
last_modified_time: tec_t_evt_rep.last_modified_time
source: tec_t_evt_rep.source
origin: tec_t_evt_rep.origin
hostname: tec_t_evt_rep.hostname
adapler_host: tec_t_evt_rep.adapler_host
administrator: tec_t_evt_rep.administrador
date_event: tec_t_evt_rep.date_event
duration: tec_t_evt_rep.duration
msg: tec_t_evt_rep.msg
msg_index: tec_t_evt_rep.msg_index
num_actions: tec_t_evt_rep.num_actions
short_acl: tec_t_evt_rep.short_acl
credibility: tec_t_evt_rep.credibility
repeat_count: tec_t_evt_rep.repeat_count
cause_date_receptn: tec_t_evt_rep.cause_date_receptn
cause_event_handle: tec_t_evt_rep.cause_event_handle
long_msg: tec_t_evt_rep.long_msg
sub_origin: tec_t_evt_rep.sub_origin
sub_source: tec_t_evt_rep.sub_source
msg_catalog: tec_t_evt_rep.msg_catalog
long_acl: tec_t_evt_rep.long_acl
    
```

tec t evt rep

```

date_reception: INTEGER NOT NULL
server_hndl: INTEGER NOT NULL
event_hndl: INTEGER NOT NULL

status: INTEGER NOT NULL
severity: INTEGER NOT NULL
class: VARCHAR2(64) NULL
last_modified_time: DATE NULL (IE1.1)
source: VARCHAR2(128) NULL
origin: VARCHAR2(128) NULL
hostname: VARCHAR2(255) NULL
adapler_host: VARCHAR2(255) NULL
administrator: VARCHAR2(128) NULL
date_event: VARCHAR2(30) NULL
duration: INTEGER NULL
msg: VARCHAR2(255) NULL
msg_index: INTEGER NULL
num_actions: INTEGER NULL
short_acl: VARCHAR2(255) NULL
credibility: INTEGER NULL
repeat_count: INTEGER NULL
cause_date_receptn: INTEGER NOT NULL
cause_event_handle: INTEGER NOT NULL
long_msg: VARCHAR2(4000) NULL
sub_origin: VARCHAR2(128) NULL
sub_source: VARCHAR2(128) NULL
msg_catalog: VARCHAR2(64) NULL
long_acl: VARCHAR2(2048) NULL
    
```

tec t task rep

```

date_reception: INTEGER NOT NULL (FK)
server_hndl: INTEGER NOT NULL (FK)
event_hndl: INTEGER NOT NULL (FK)
task_number: INTEGER NOT NULL

status: INTEGER NULL
command: VARCHAR2(255) NULL
start_time: INTEGER NULL
exit_status: INTEGER NULL
short_execmsg: VARCHAR2(255) NULL
long_execmsg: VARCHAR2(3467) NULL
    
```

tec t slots evt

```

date_reception: INTEGER NOT NULL (FK)
server_hndl: INTEGER NOT NULL (FK)
event_hndl: INTEGER NOT NULL (FK)
slot_name: VARCHAR2(64) NOT NULL

short_slot_value: VARCHAR2(255) NULL
long_slot_value: LONG VARCHAR NULL
    
```

TEC T CONSOLES

```

console_id: INTEGER NOT NULL
name: VARCHAR2(255) NOT NULL
settings_ser_obj: LONG VARCHAR NOT NULL
    
```

tec t isa

```

parent: VARCHAR2(64) NULL (IE1.1)
child: VARCHAR2(64) NOT NULL (IE2.1)
    
```

tec t evt rec log

```

date_entry: INTEGER NOT NULL
server_hndl: INTEGER NOT NULL
reception_id: INTEGER NOT NULL

status: INTEGER NOT NULL
agent_id: INTEGER NOT NULL
short_message: VARCHAR2(255) NULL
commnt: VARCHAR2(255) NULL
long_message: LONG VARCHAR NULL
    
```

TEC T ASSIGN OP

```

console_id: INTEGER NOT NULL (FK)
operator_id: VARCHAR2(255) NOT NULL (FK)
    
```

TEC T ASSIGN EG

```

console_id: INTEGER NOT NULL (FK)
group_id: INTEGER NOT NULL (FK)
    
```

tec t severity

```

rulebase_id: tec_t_enumerations.rulebase_id
code: tec_t_enumerations.int_value
description: tec_t_enumerations.string_value
    
```

TEC T OPERATORS

```

operator_id: VARCHAR2(255) NOT NULL
name: VARCHAR2(255) NOT NULL
settings_ser_obj: LONG VARCHAR NOT NULL
    
```

tec t enumerations

```

int_value: INTEGER NOT NULL
enum_name: VARCHAR2(80) NOT NULL
rulebase_id: INTEGER NOT NULL
string_value: VARCHAR2(255) NOT NULL
    
```

tec t status event

```

rulebase_id: tec_t_enumerations.rulebase_id
code: tec_t_enumerations.int_value
description: tec_t_enumerations.string_value
    
```

TEC T EVENT_GROUPS

```

group_id: INTEGER NOT NULL
name: VARCHAR2(255) NOT NULL
group_ser_obj: LONG VARCHAR NOT NULL
    
```

tec t status task

```

rulebase_id: tec_t_enumerations.rulebase_id
code: tec_t_enumerations.int_value
description: tec_t_enumerations.string_value
    
```

TEC T EG WHRCLAUSE

```

group_id: INTEGER NOT NULL (FK)
whereclause: LONG VARCHAR NULL
    
```

8.3. Modelo Relacional Base de Conhecimento

PROCEDURE
🔑 TITLE
🔹 TEAM_NAME
🔹 KEY_
🔹 ENDPOINT
🔹 OS_TYPE
🔹 APPL
🔹 HWTYPE
🔹 DESCRIPTION

9 Anexo 2

9.1. Vocabulário D2R Server

```
@prefix map: <file:/C:/D2RSERVER/d2r-server-0.6/inv_serv_filter2.n3#> .
@prefix map2: <file:/C:/D2RSERVER/d2r-server-0.6/procedure.n3#> .
@prefix map3: <file:/C:/D2RSERVER/d2r-server-0.6/tec_penelope.n3#> .
@prefix db: <> .
@prefix vocab: <http://serverX:2020/vocab/resource/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix d2rq: <http://www.wiwiss.fu-berlin.de/suhl/bizer/D2RQ/0.1#> .
@prefix jdbc: <http://d2rq.org/terms/jdbc/> .
@prefix d2r: <http://sites.wiwiss.fu-berlin.de/suhl/bizer/d2r-server/config.rdf#> .
```

```
<> a d2r:Server;
  rdfs:label "Conhecimento sobre Servidores";
  d2r:baseURI <http://serverX:2020/>;
  d2r:port 2020;
  d2r:documentMetadata [
    rdfs:comment "Conhecimento de Servidores";
  ];
  d2r:vocabularyIncludeInstances true;
  .

map:database a d2rq:Database;
  d2rq:jdbcDriver "oracle.jdbc.driver.OracleDriver";
  d2rq:jdbcDSN "jdbc:oracle:thin:@ip-removido:porta-removido:inst-removido";
  d2rq:username "user-removido";
  d2rq:password "pass-removido";
  .

map2:database a d2rq:Database;
  d2rq:jdbcDriver "com.mysql.jdbc.Driver";
  d2rq:jdbcDSN "jdbc:mysql://localhost/procedimentos";
```



```

d2rq:username "user-removido";
d2rq:password "pass-removido";
jdbc:autoReconnect "true";
jdbc:zeroDateTimeBehavior "convertToNull";
.
map3:Configuration a d2rq:Configuration;
  d2rq:serveVocabulary true;
.

map3:database a d2rq:Database;
  d2rq:jdbcDriver "oracle.jdbc.driver.OracleDriver";
  d2rq:jdbcDSN "jdbc:oracle:thin:@IP-removido:PORTA-removido:INST-removido";
  d2rq:username "user-removido";
  d2rq:password "pass-removido";
.

# Table COMPUTER

map:COMPUTER_MONIT a d2rq:ClassMap;
  d2rq:dataStorage map:database;
  d2rq:uriPattern
"computer/@@COMPUTER_MONIT.TME_OBJECT_LABEL|urlify@@";
  d2rq:class vocab:computer;
  d2rq:classDefinitionLabel "Computers";
.

map:COMPUTER_MONIT_label a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:COMPUTER_MONIT;
  d2rq:property rdfs:label;
  d2rq:pattern "@@COMPUTER_MONIT.TME_OBJECT_LABEL@@";
.

map:COMPUTER_MONIT_COMPUTER_SYS_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:COMPUTER_MONIT;
  d2rq:property vocab:ENDPOINT_SYS_ID;
  d2rq:propertyDefinitionLabel "COMPUTER COMPUTER_SYS_ID";
  d2rq:column "COMPUTER_MONIT.COMPUTER_SYS_ID";
.

map:COMPUTER_MONIT_TME_OBJECT_LABEL a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:COMPUTER_MONIT;
  d2rq:property vocab:ENDPOINT;
  d2rq:propertyDefinitionLabel "COMPUTER TME_OBJECT_LABEL";

```

```
d2rq:column "COMPUTER_MONIT.TME_OBJECT_LABEL";
.
map:COMPUTER_MONIT_COMPUTER_MODEL a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:COMPUTER_MODEL;
d2rq:propertyDefinitionLabel "COMPUTER COMPUTER_MODEL";
d2rq:column "COMPUTER_MONIT.COMPUTER_MODEL";
.
map:COMPUTER_MONIT_SYS_SER_NUM a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:SERIAL_NUMBER;
d2rq:propertyDefinitionLabel "COMPUTER SYS_SER_NUM";
d2rq:column "COMPUTER_MONIT.SYS_SER_NUM";
.
map:COMPUTER_MONIT_OS_NAME a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:OS_NAME;
d2rq:propertyDefinitionLabel "COMPUTER OS_NAME";
d2rq:column "COMPUTER_MONIT.OS_NAME";
.
map:COMPUTER_MONIT_OS_TYPE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:OS_TYPE;
d2rq:propertyDefinitionLabel "COMPUTER OS_TYPE";
d2rq:column "COMPUTER_MONIT.OS_TYPE";
.
map:COMPUTER_MONIT_OS_SUB_VERS a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:OS_VERSION;
d2rq:propertyDefinitionLabel "COMPUTER OS_SUB_VERS";
d2rq:column "COMPUTER_MONIT.OS_SUB_VERS";
.
map:COMPUTER_MONIT_OS_KERNEL_MODE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:OS_X;
d2rq:propertyDefinitionLabel "COMPUTER OS_KERNEL_MODE";
d2rq:column "COMPUTER_MONIT.OS_KERNEL_MODE";
.
map:COMPUTER_MONIT_OS_ARCH a d2rq:PropertyBridge;
```

```

d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:OS_ARCH;
d2rq:propertyDefinitionLabel "COMPUTER OS_ARCH";
d2rq:column "COMPUTER_MONIT.OS_ARCH";
.
map:COMPUTER_MONIT_RECORD_TIME a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_MONIT;
d2rq:property vocab:RECORD_TIME;
d2rq:propertyDefinitionLabel "COMPUTER RECORD_TIME";
d2rq:column "COMPUTER_MONIT.RECORD_TIME";
.

# Table HOSTS

map:HOSTS_MONIT a d2rq:ClassMap;
d2rq:dataStorage map:database;
d2rq:uriPattern "computer/@@HOSTS_MONIT.HOST|urlify@@";
d2rq:class vocab:computer;
d2rq:classDefinitionLabel "Computer Team";
.
map:HOSTS_MONIT__label a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:HOSTS_MONIT;
d2rq:property rdfs:label;
d2rq:pattern "@@HOSTS_MONIT.HOST@@";
.
map:HOSTS_MONIT_HOST a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:HOSTS_MONIT;
d2rq:property vocab:ENDPOINT;
d2rq:refersToClassMap map:COMPUTER_MONIT;
d2rq:join "HOSTS_MONIT.HOST = COMPUTER_MONIT.TME_OBJECT_LABEL";
.
map:HOSTS_MONIT_REGIONAL a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:HOSTS_MONIT;
d2rq:property vocab:REGIONAL;
d2rq:propertyDefinitionLabel "TEAM REGIONAL";
d2rq:column "HOSTS_MONIT.REGIONAL";
.
map:HOSTS_MONIT_GATIUNID a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:HOSTS_MONIT;
d2rq:property vocab:UNIDADE;

```

```

d2rq:propertyDefinitionLabel "TEAM UNIT";
d2rq:column "HOSTS_MONIT.GATIUNID";
.
map:HOSTS_MONIT_GATIRESP a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:HOSTS_MONIT;
d2rq:property vocab:TEAM_NAME;
d2rq:propertyDefinitionLabel "TEAM NAME";
d2rq:column "HOSTS_MONIT.GATIRESP";
.
# Table procedures
map2:procedures a d2rq:ClassMap;
d2rq:dataStorage map2:database;
d2rq:uriPattern "procedures/@@procedures.idprocedure|urlify@@";
d2rq:class vocab:procedures;
d2rq:classDefinitionLabel "Procedures";
.
map2:procedures__label a d2rq:PropertyBridge;
d2rq:belongsToClassMap map2:procedures;
d2rq:property rdfs:label;
d2rq:pattern "@@procedures.title@@";
.
map2:procedures_idprocedure a d2rq:PropertyBridge;
d2rq:belongsToClassMap map2:procedures;
d2rq:property vocab:idprocedure;
d2rq:propertyDefinitionLabel "procedures idprocedure";
d2rq:column "procedures.idprocedure";
d2rq:datatype xsd:int;
.
map2:procedures_title a d2rq:PropertyBridge;
d2rq:belongsToClassMap map2:procedures;
d2rq:property vocab:title;
d2rq:propertyDefinitionLabel "procedures title";
d2rq:column "procedures.title";
.
map2:procedures_key a d2rq:PropertyBridge;
d2rq:belongsToClassMap map2:procedures;
d2rq:property vocab:key;
d2rq:propertyDefinitionLabel "procedures key";
d2rq:column "procedures.key";
.

```

```
map2:procedures_team a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:TEAM_NAME;
  d2rq:propertyDefinitionLabel "procedures team";
  d2rq:column "procedures.team";
.

map2:procedures_alarmtype a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:CLASS;
  d2rq:propertyDefinitionLabel "procedures class";
  d2rq:column "procedures.alarmtype";
.

map2:procedures_appl a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:appl;
  d2rq:propertyDefinitionLabel "procedures appl";
  d2rq:column "procedures.appl";
.

map2:procedures_hostname a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:ENDPOINT;
  d2rq:propertyDefinitionLabel "procedures ENDPOINT";
  d2rq:column "procedures.hostname";
.

map2:procedures_os a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:OS_TYPE;
  d2rq:propertyDefinitionLabel "procedures os";
  d2rq:column "procedures.os";
.

map2:procedures_hardwaretype a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:hardwaretype;
  d2rq:propertyDefinitionLabel "procedures hardwaretype";
  d2rq:column "procedures.hardwaretype";
.

map2:procedures_desc a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map2:procedures;
  d2rq:property vocab:desc;
  d2rq:propertyDefinitionLabel "procedures desc";
```

```

    d2rq:column "procedures.desc";
    .

# Table TEC.EVENT_OPEN
map3:TEC.EVENT_OPEN a d2rq:ClassMap;
    d2rq:dataStorage map3:database;
    d2rq:uriPattern
"event/@@TEC.EVENT_OPEN.DATE_RECEPTION|urlify@ @/@TEC.EVENT_OPEN.EVENT
T_HNDL|urlify@ @/@TEC.EVENT_OPEN.HOSTNAME|urlify@@";
    d2rq:class vocab:event;
    d2rq:classDefinitionLabel "Events";
    .

map3:TEC.EVENT_OPEN__label a d2rq:PropertyBridge;
    d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
    d2rq:property rdfs:label;
    d2rq:pattern "@@TEC.EVENT_OPEN.HOSTNAME@";
    .

map3:TEC.EVENT_OPEN_DATE_RECEPTION a d2rq:PropertyBridge;
    d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
    d2rq:property vocab:DATE_EVENT_EPOCH;
    d2rq:propertyDefinitionLabel "TEC DATE_RECEPTION";
    d2rq:column "TEC.EVENT_OPEN.DATE_RECEPTION";
    d2rq:datatype xsd:decimal;
    d2rq:valueRegex "^[0-9]{10}$";
    d2rq:valueMaxLength "10";
    .

map3:TEC.EVENT_OPEN_DATE_EVENT a d2rq:PropertyBridge;
    d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
    d2rq:property vocab:DATE_EVENT;
    d2rq:propertyDefinitionLabel "TEC DATE_EVENT";
    d2rq:column "TEC.EVENT_OPEN.DATE_EVENT";
    .

map3:TEC.EVENT_OPEN_EVENT_HNDL a d2rq:PropertyBridge;
    d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
    d2rq:property vocab:EVENT_HNDL;
    d2rq:propertyDefinitionLabel "TEC EVENT_HNDL";
    d2rq:column "TEC.EVENT_OPEN.EVENT_HNDL";
    d2rq:datatype xsd:decimal;
    d2rq:valueRegex "^[0-9]{1}$";

```

```
d2rq:valueMaxLength "1";
```

```
.
```

```
map3:TEC.EVENT_OPEN_STATUS a d2rq:PropertyBridge;
```

```
d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
```

```
d2rq:property vocab:STATUS;
```

```
d2rq:propertyDefinitionLabel "TEC STATUS";
```

```
d2rq:column "TEC.EVENT_OPEN.STATUS";
```

```
d2rq:datatype xsd:decimal;
```

```
d2rq:valueRegex "^[0-9]{2}$";
```

```
d2rq:valueMaxLength "2";
```

```
.
```

```
map3:TEC.EVENT_OPEN_SEVERITY a d2rq:PropertyBridge;
```

```
d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
```

```
d2rq:property vocab:SEVERITY;
```

```
d2rq:propertyDefinitionLabel "TEC SEVERITY";
```

```
d2rq:column "TEC.EVENT_OPEN.SEVERITY";
```

```
d2rq:datatype xsd:decimal;
```

```
d2rq:valueRegex "^[0-9]{1}$";
```

```
d2rq:valueMaxLength "2";
```

```
.
```

```
map3:TEC.EVENT_OPEN_CLASS a d2rq:PropertyBridge;
```

```
d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
```

```
d2rq:property vocab:CLASS;
```

```
d2rq:propertyDefinitionLabel "TEC CLASS";
```

```
d2rq:column "TEC.EVENT_OPEN.CLASS";
```

```
.
```

```
map3:TEC.EVENT_OPEN_ORIGIN a d2rq:PropertyBridge;
```

```
d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
```

```
d2rq:property vocab:ENDPOINT_IP;
```

```
d2rq:propertyDefinitionLabel "TEC ORIGIN";
```

```
d2rq:column "TEC.EVENT_OPEN.ORIGIN";
```

```
d2rq:valueMaxLength "15";
```

```
.
```

```
map3:TEC.EVENT_OPEN_HOSTNAME a d2rq:PropertyBridge;
```

```
d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;
```

```
d2rq:property vocab:ENDPOINT;
```

```
d2rq:propertyDefinitionLabel "TEC HOSTNAME";
```

```
d2rq:column "TEC.EVENT_OPEN.HOSTNAME";
```

d2rq:valueMaxLength "15";

.

map3:TEC.EVENT_OPEN_DURATION a d2rq:PropertyBridge;

d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;

d2rq:property vocab:DURATION;

d2rq:propertyDefinitionLabel "TEC DURATION";

d2rq:column "TEC.EVENT_OPEN.DURATION";

d2rq:datatype xsd:decimal;

d2rq:valueMaxLength "5";

.

map3:TEC.EVENT_OPEN_MSG a d2rq:PropertyBridge;

d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;

d2rq:property vocab:MSG;

d2rq:propertyDefinitionLabel "TEC MSG";

d2rq:column "TEC.EVENT_OPEN.MSG";

.

map3:TEC.EVENT_OPEN_REPEAT_COUNT a d2rq:PropertyBridge;

d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;

d2rq:property vocab:REPEAT_COUNT;

d2rq:propertyDefinitionLabel "TEC REPEAT_COUNT";

d2rq:column "TEC.EVENT_OPEN.REPEAT_COUNT";

d2rq:datatype xsd:decimal;

d2rq:valueMaxLength "1";

d2rq:valueRegex "^[0-9]{1}\$";

.

map3:TEC.EVENT_OPEN_LONG_MSG a d2rq:PropertyBridge;

d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;

d2rq:property vocab:LONG_MSG;

d2rq:propertyDefinitionLabel "TEC LONG_MSG";

d2rq:column "TEC.EVENT_OPEN.LONG_MSG";

.

map3:TEC.EVENT_OPEN_MSG_CATALOG a d2rq:PropertyBridge;

d2rq:belongsToClassMap map3:TEC.EVENT_OPEN;

d2rq:property vocab:REGION;

d2rq:propertyDefinitionLabel "TEC REGION";

d2rq:column "TEC.EVENT_OPEN.MSG_CATALOG";

d2rq:valueMaxLength "10";


```

.
# Table INST_PROCESSOR

map:INST_PROCESSOR a d2rq:ClassMap;
  d2rq:dataStorage map:database;
  d2rq:uriPattern

"inst_processor/@@INST_PROCESSOR.COMPUTER_SYS_ID|urlify@@/@@INST_PROCESSOR.PROCESSOR_ID|urlify@@/@@INST_PROCESSOR.PROCESSOR_NUM|urlify@@@";
  d2rq:class vocab:inst_processor;
  d2rq:classDefinitionLabel "Installed Processors";
.

map:INST_PROCESSOR__label a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_PROCESSOR;
  d2rq:property rdfs:label;
  d2rq:pattern "@@INST_PROCESSOR.PROCESSOR_ID@";
.

map:INST_PROCESSOR_PROCESSOR_NUM a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_PROCESSOR;
  d2rq:property vocab:PROCESSOR_NUM;
  d2rq:propertyDefinitionLabel "INST_PROCESSOR PROCESSOR_NUM";
  d2rq:column "INST_PROCESSOR.PROCESSOR_NUM";
  d2rq:datatype xsd:decimal;
.

map:INST_PROCESSOR_SER_NUM a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_PROCESSOR;
  d2rq:property vocab:PROCESSOR_SER_NUM;
  d2rq:propertyDefinitionLabel "INST_PROCESSOR SER_NUM";
  d2rq:column "INST_PROCESSOR.SER_NUM";
.

map:INST_PROCESSOR_COMPUTER_SYS_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_PROCESSOR;
  d2rq:property vocab:ENDPOINT_SYS_ID;
  d2rq:refersToClassMap map:COMPUTER_MONIT;
  d2rq:join "INST_PROCESSOR.COMPUTER_SYS_ID =
COMPUTER_MONIT.COMPUTER_SYS_ID";
.

map:INST_PROCESSOR_PROCESSOR_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_PROCESSOR;
  d2rq:property vocab:PROCESSOR_ID;

```

```
d2rq:refersToClassMap map:PROCESSOR;
d2rq:join "INST_PROCESSOR.PROCESSOR_ID = PROCESSOR.PROCESSOR_ID";
```

```
# Table PROCESSOR
```

```
map:PROCESSOR a d2rq:ClassMap;
  d2rq:dataStorage map:database;
  d2rq:uriPattern "processor/@@PROCESSOR.PROCESSOR_ID|urlify@@";
  d2rq:class vocab:processor;
  d2rq:classDefinitionLabel "Processors";
```

```
map:PROCESSOR__label a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:PROCESSOR;
  d2rq:property rdfs:label;
  d2rq:pattern "@@PROCESSOR.PROCESSOR_MODEL@@";
```

```
map:PROCESSOR_PROCESSOR_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:PROCESSOR;
  d2rq:property vocab:PROCESSOR_ID;
  d2rq:propertyDefinitionLabel "PROCESSOR PROCESSOR_ID";
  d2rq:column "PROCESSOR.PROCESSOR_ID";
```

```
map:PROCESSOR_MANUFACTURER a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:PROCESSOR;
  d2rq:property vocab:PROCESSOR_MANUFACTURER;
  d2rq:propertyDefinitionLabel "PROCESSOR MANUFACTURER";
  d2rq:column "PROCESSOR.MANUFACTURER";
```

```
map:PROCESSOR_PROCESSOR_MODEL a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:PROCESSOR;
  d2rq:property vocab:PROCESSOR_MODEL;
  d2rq:propertyDefinitionLabel "PROCESSOR PROCESSOR_MODEL";
  d2rq:column "PROCESSOR.PROCESSOR_MODEL";
```

```
map:PROCESSOR_MAX_SPEED a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:PROCESSOR;
  d2rq:property vocab:MAX_SPEED;
  d2rq:propertyDefinitionLabel "PROCESSOR MAX_SPEED";
```

```
d2rq:column "PROCESSOR.MAX_SPEED";
d2rq:datatype xsd:decimal;
```

```
.

map:PROCESSOR_CPU_INTERFACE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:PROCESSOR;
d2rq:property vocab:CPU_INTERFACE;
d2rq:propertyDefinitionLabel "PROCESSOR CPU_INTERFACE";
d2rq:column "PROCESSOR.CPU_INTERFACE";
```

```
.

# Table INST_PARTITION
```

```
map:INST_PARTITION a d2rq:ClassMap;
d2rq:dataStorage map:database;
d2rq:uriPattern
"filesystem/@@INST_PARTITION.COMPUTER_SYS_ID|urlify@@/@@INST_PARTITION.FS
_ACCESS_POINT|urlify@@";
```

```
d2rq:class vocab:filesystem;
d2rq:classDefinitionLabel "Filesystems";
```

```
.

map:INST_PARTITION__label a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property rdfs:label;
d2rq:pattern "@@INST_PARTITION.FS_ACCESS_POINT@@";
```

```
.

map:INST_PARTITION_FS_ACCESS_POINT a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:FS_ACCESS_POINT;
d2rq:propertyDefinitionLabel "INST_PARTITION FS_ACCESS_POINT";
d2rq:column "INST_PARTITION.FS_ACCESS_POINT";
```

```
.

map:INST_PARTITION_DEV_NAME a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:DEV_NAME;
d2rq:propertyDefinitionLabel "INST_PARTITION DEV_NAME";
d2rq:column "INST_PARTITION.DEV_NAME";
```

```
.

map:INST_PARTITION_PARTITION_TYPE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
```

```
d2rq:property vocab:PARTITION_TYPE;
d2rq:propertyDefinitionLabel "INST_PARTITION PARTITION_TYPE";
d2rq:column "INST_PARTITION.PARTITION_TYPE";
.

map:INST_PARTITION_MEDIA_TYPE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:MEDIA_TYPE;
d2rq:propertyDefinitionLabel "INST_PARTITION MEDIA_TYPE";
d2rq:column "INST_PARTITION.MEDIA_TYPE";
.

map:INST_PARTITION_FS_TYPE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:FS_TYPE;
d2rq:propertyDefinitionLabel "INST_PARTITION FS_TYPE";
d2rq:column "INST_PARTITION.FS_TYPE";
.

map:INST_PARTITION_FS_MOUNT_POINT a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:FS_MOUNT_POINT;
d2rq:propertyDefinitionLabel "INST_PARTITION FS_MOUNT_POINT";
d2rq:column "INST_PARTITION.FS_MOUNT_POINT";
.

map:INST_PARTITION_FS_TOTAL_SIZE_KB a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:FS_TOTAL_SIZE_KB;
d2rq:propertyDefinitionLabel "INST_PARTITION FS_TOTAL_SIZE_KB";
d2rq:column "INST_PARTITION.FS_TOTAL_SIZE_KB";
d2rq:datatype xsd:decimal;
.

map:INST_PARTITION_FS_FREE_SIZE_KB a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
d2rq:property vocab:FS_FREE_SIZE_KB;
d2rq:propertyDefinitionLabel "INST_PARTITION FS_FREE_SIZE_KB";
d2rq:column "INST_PARTITION.FS_FREE_SIZE_KB";
d2rq:datatype xsd:decimal;
.

map:INST_PARTITION_COMPUTER_SYS_ID a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_PARTITION;
```

```

d2rq:property vocab:ENDPOINT_SYS_ID;
d2rq:propertyDefinitionLabel "INST_PARTITION COMPUTER_SYS_ID";
d2rq:refersToClassMap map:COMPUTER_MONIT;
d2rq:join          "INST_PARTITION.COMPUTER_SYS_ID          =
COMPUTER_MONIT.COMPUTER_SYS_ID";

```

```

# Table COMPUTER_SYS_MEM

```

```

map:COMPUTER_SYS_MEM a d2rq:ClassMap;
d2rq:dataStorage map:database;
d2rq:uriPattern
"memory/@@COMPUTER_SYS_MEM.COMPUTER_SYS_ID|urlify@@";
d2rq:class vocab:memory;
d2rq:classDefinitionLabel "Computer Memory";
.
map:COMPUTER_SYS_MEM__label a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_SYS_MEM;
d2rq:property rdfs:label;
d2rq:pattern "@@COMPUTER_SYS_MEM.PHYSICAL_TOTAL_KB@@";
.
map:COMPUTER_SYS_MEM_PHYSICAL_TOTAL_KB a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_SYS_MEM;
d2rq:property vocab:MEM_PHYSICAL_TOTAL_KB;
d2rq:propertyDefinitionLabel "COMPUTER_SYS_MEM PHYSICAL_TOTAL_KB";
d2rq:column "COMPUTER_SYS_MEM.PHYSICAL_TOTAL_KB";
d2rq:datatype xsd:decimal;
.
map:COMPUTER_SYS_MEM_TOTAL_PAGES a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_SYS_MEM;
d2rq:property vocab:MEM_TOTAL_PAGES;
d2rq:propertyDefinitionLabel "COMPUTER_SYS_MEM TOTAL_PAGES";
d2rq:column "COMPUTER_SYS_MEM.TOTAL_PAGES";
d2rq:datatype xsd:decimal;
.
map:COMPUTER_SYS_MEM_PAGE_SIZE a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_SYS_MEM;
d2rq:property vocab:MEM_PAGE_SIZE;
d2rq:propertyDefinitionLabel "MEM PAGE_SIZE";

```

```

d2rq:column "COMPUTER_SYS_MEM.PAGE_SIZE";
d2rq:datatype xsd:decimal;
.
map:COMPUTER_SYS_MEM_VIRT_TOTAL_KB a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_SYS_MEM;
d2rq:property vocab:MEM_VIRT_TOTAL_KB;
d2rq:propertyDefinitionLabel "COMPUTER_SYS_MEM_VIRT_TOTAL_KB";
d2rq:column "COMPUTER_SYS_MEM.VIRT_TOTAL_KB";
d2rq:datatype xsd:decimal;
.
map:COMPUTER_SYS_MEM_COMPUTER_SYS_ID a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:COMPUTER_SYS_MEM;
d2rq:property vocab:ENDPOINT_SYS_ID;
d2rq:refersToClassMap map:COMPUTER_MONIT;
d2rq:join          "COMPUTER_SYS_MEM.COMPUTER_SYS_ID          =
COMPUTER_MONIT.COMPUTER_SYS_ID";
.
# Table INST_NATIV_SWARE

map:INST_NATIV_SWARE a d2rq:ClassMap;
d2rq:dataStorage map:database;
d2rq:uriPattern
"INST_NATIV_SWARE/@@INST_NATIV_SWARE.COMPUTER_SYS_ID|urlify@@/@@INST
T_NATIV_SWARE.NATIV_ID|urlify@@@";
d2rq:class <http://localhost:2020/vocab/resource/INST_NATIV_SWARE>;
d2rq:classDefinitionLabel "INST_NATIV_SWARE";
.
map:INVTIV:INST_NATIV_SWARE__label> a d2rq:PropertyBridge;
d2rq:belongsToClassMap          <file:/C:/D2RSERVER/d2r-server-
0.6/inv_serv2.n3#INST_NATIV_SWARE>;
d2rq:property rdfs:label;
d2rq:pattern          "INST_NATIV_SWARE
#@@INST_NATIV_SWARE.COMPUTER_SYS_ID@@/@@INST_NATIV_SWARE.NATIV_I
D@@@";
.
map:INST_NATIV_SWARE_FILE_PATH a d2rq:PropertyBridge;
d2rq:belongsToClassMap map:INST_NATIV_SWARE
d2rq:property vocab:INST_NATIV_SWARE_FILE_PATH;
d2rq:propertyDefinitionLabel "INST_NATIV_SWARE_FILE_PATH";
d2rq:column "INST_NATIV_SWARE.FILE_PATH";

```

```

.
map:INST_NATIV_SWARE_RECORD_TIME a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_NATIV_SWARE
  d2rq:property vocab:INST_NATIV_SWARE_RECORD_TIME;
  d2rq:propertyDefinitionLabel "INST_NATIV_SWARE_RECORD_TIME";
  d2rq:column "INST_NATIV_SWARE.RECORD_TIME";
  d2rq:datatype xsd:date;
.

```

```

.
map:INST_NATIV_SWARE_NATIV_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_NATIV_SWARE
  d2rq:property vocab:INST_NATIV_SWARE_NATIV_ID;
  d2rq:refersToClassMap map:INST_NATIV_SWARE
  d2rq:join "INST_NATIV_SWARE.NATIV_ID = NATIV_SWARE.NATIV_ID";
.

```

```

.
map:INST_NATIV_SWARE_COMPUTER_SYS_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:INST_NATIV_SWARE
  d2rq:property vocab:INST_NATIV_SWARE_COMPUTER_SYS_ID;
  d2rq:refersToClassMap map:INST_NATIV_SWARE
  d2rq:join "INST_NATIV_SWARE.COMPUTER_SYS_ID =
COMPUTER.COMPUTER_SYS_ID";
.

```

Table NATIV_SWARE

```

map:NATIV_SWARE a d2rq:ClassMap;
  d2rq:dataStorage map:database;
  d2rq:uriPattern "NATIV_SWARE/@@NATIV_SWARE.NATIV_ID|urlify@@";
  d2rq:class map:NATIV_SWARE; d2rq:classDefinitionLabel "NATIV_SWARE";
.

```

```

map:NATIV_SWARE a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:NATIV_SWARE;
  d2rq:property rdfs:label;
  d2rq:pattern "NATIV_SWARE #@@NATIV_SWARE.NATIV_ID@@";
.

```

```

.
map:NATIV_SWARE_NATIV_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:NATIV_SWARE;
  d2rq:property vocab:NATIV_SWARE_NATIV_ID;
  d2rq:propertyDefinitionLabel "NATIV_SWARE NATIV_ID";
  d2rq:column "NATIV_SWARE.NATIV_ID";
.

```

```
map:NATIV_SWARE_PACKAGE_NAME a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:NATIV_SWARE;
  d2rq:property vocab:NATIV_SWARE_PACKAGE_NAME;
  d2rq:propertyDefinitionLabel "NATIV_SWARE PACKAGE_NAME";
  d2rq:column "NATIV_SWARE.PACKAGE_NAME";
.

map:NATIV_SWARE_PACKAGE_VERS a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:NATIV_SWARE;
  d2rq:property vocab:NATIV_SWARE_PACKAGE_VERS;
  d2rq:propertyDefinitionLabel "NATIV_SWARE PACKAGE_VERS";
  d2rq:column "NATIV_SWARE.PACKAGE_VERS";
.

map:NATIV_SWARE_PUBLISHER a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:NATIV_SWARE;
  d2rq:property vocab:NATIV_SWARE_PUBLISHER;
  d2rq:propertyDefinitionLabel "NATIV_SWARE PUBLISHER";
  d2rq:column "NATIV_SWARE.PUBLISHER";
.

map:NATIV_SWARE_PACKAGE_ID a d2rq:PropertyBridge;
  d2rq:belongsToClassMap map:NATIV_SWARE;
  d2rq:property vocab:NATIV_SWARE_PACKAGE_ID;
  d2rq:propertyDefinitionLabel "NATIV_SWARE PACKAGE_ID";
  d2rq:column "NATIV_SWARE.PACKAGE_ID";
.
```