

-----EPICS SQL DDL Scripts-----

```
CREATE TABLE PEDIGREE(  
    PED_SN VARCHAR2(20),  
    PED_ID VARCHAR2(20),  
    PED_DATE VARCHAR2(20));
```

```
CREATE TABLE ASN(  
    ASN_SN VARCHAR2(20),  
    ASN_DATE VARCHAR2(20),  
    ASN_STATUS VARCHAR2(20),  
    PED_ID VARCHAR2(20));
```

```
CREATE TABLE CONTAINERS(  
    CON_SN VARCHAR2(20),  
    CON_STATUS VARCHAR2(20),  
    PED_ID VARCHAR2(20));
```

```
CREATE TABLE INVOICES(  
    INV_SN VARCHAR2(20),  
    INV_DATE VARCHAR2(20),  
    INV_PAID VARCHAR2(20),  
    PED_ID VARCHAR2(20));
```

```
CREATE TABLE ITEMS(  
    ITEMS_SN VARCHAR2(20),  
    ITEMS_STATUS VARCHAR2(20),  
    PED_ID VARCHAR2(20));
```

```
CREATE TABLE ORDERS(  
    ORD_SN VARCHAR2(20),  
    ORD_DATE VARCHAR2(20),  
    ORD_PROCESSED VARCHAR2(20),  
    PED_ID VARCHAR2(20));
```

```
ALTER TABLE PEDIGREE  
ADD CONSTRAINT PED_PK PRIMARY KEY(PED_SN);
```

```
ALTER TABLE PEDIGREE  
ADD CONSTRAINT PED_UK UNIQUE(PED_ID);
```

```
ALTER TABLE ASN  
ADD CONSTRAINT ASN_PK PRIMARY KEY(ASN_SN);
```

```
ALTER TABLE CONTAINERS  
ADD CONSTRAINT CON_PK PRIMARY KEY(CON_SN);
```

```
ALTER TABLE INVOICES  
ADD CONSTRAINT INV_PK PRIMARY KEY(INV_SN);
```

```
ALTER TABLE ITEMS  
ADD CONSTRAINT ITEMS_PK PRIMARY KEY(ITEMS_SN);
```

```
ALTER TABLE ORDERS  
ADD CONSTRAINT ORD_PK PRIMARY KEY(ORD_SN);
```

```
ALTER TABLE ASN
ADD CONSTRAINT ASN_FK1 FOREIGN KEY(PED_ID)
REFERENCES PEDIGREE(PED_ID);
```

```
ALTER TABLE CONTAINERS
ADD CONSTRAINT CON_FK1 FOREIGN KEY(PED_ID)
REFERENCES PEDIGREE(PED_ID);
```

```
ALTER TABLE INVOICES
ADD CONSTRAINT INV_FK1 FOREIGN KEY(PED_ID)
REFERENCES PEDIGREE(PED_ID);
```

```
ALTER TABLE ITEMS
ADD CONSTRAINT ITEMS_FK1 FOREIGN KEY(PED_ID)
REFERENCES PEDIGREE(PED_ID);
```

```
ALTER TABLE ORDERS
ADD CONSTRAINT ORD_FK1 FOREIGN KEY(PED_ID)
REFERENCES PEDIGREE(PED_ID);
```

```
select table_name, constraint_name, constraint_type from user_constraints;
```

-----EPCIS SQL DML Scripts -----

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PDIZIAZ','DOC101', '09-11-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('P29Z8ZN','DOC102', '09-11-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('P91XMY','DOC103', '09-11-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PHBIZQ9','DOC104', '09-11-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PQZYYZM','DOC105', '09-12-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PP9VXU4','DOC106', '09-19-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('P87ERTK','DOC107', '09-19-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PLKL620','DOC108', '09-20-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PBB964A','DOC109', '09-20-2013');
```

```
INSERT INTO PEDIGREE (PED_SN, PED_ID, PED_DATE) VALUES ('PZXEP00','DOC110', '09-29-2013');
```

```
INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASN2928', '07-02-
```

2013', 'TRANSMITTED', 'DOC101');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASN39Z9', '07-02-2013', 'TRANSMITTED', 'DOC101');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASNZIZB', '07-02-2013', 'TRANSMITTED', 'DOC101');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASN29Z7', '07-11-2013', 'TRANSMITTED', 'DOC102');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASNZ0ZE', '07-19-2013', 'ACKNOWLEDGED', 'DOC102');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASN00HX', '07-22-2013', 'ACKNOWLEDGED', 'DOC102');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASNBQZ1', '07-22-2013', 'TRANSMITTED', 'DOC103');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASN70HY', '07-25-2013', 'ACKNOWLEDGED', 'DOC103');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASNVPL8', '07-25-2013', 'TRANSMITTED', 'DOC104');

INSERT INTO ASN (ASN_SN, ASN_DATE, ASN_STATUS, PED_ID) VALUES ('ASNKA0I', '07-29-2013', 'ACKNOWLEDGED', 'DOC104');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CON111989', 'RECEIVED', 'DOC101');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CON0038HT', 'SHIPPED', 'DOC101');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONZG9G20', 'SHIPPED', 'DOC101');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONQZCX91', 'SHIPPED', 'DOC101');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CON20XBV2', 'RECEIVED', 'DOC102');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONX901BZ', 'SHIPPED', 'DOC102');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONXX9141', 'RECEIVED', 'DOC103');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONHGV0XU', 'RECEIVED', 'DOC103');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONQPPBV6', 'SHIPPED', 'DOC104');

INSERT INTO CONTAINERS (CON_SN, CON_STATUS, PED_ID) VALUES ('CONNM72WL', 'RECEIVED', 'DOC104');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INV3030', '04-01-2013', 'TRUE', 'DOC101');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INVX39X', '04-01-2013', 'TRUE', 'DOC101');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INVZ29B', '04-01-2013', 'TRUE', 'DOC101');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INVYZB9', '04-01-2013', 'TRUE', 'DOC102');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INV99ZY', '04-12-2013', 'TRUE', 'DOC102');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INVXBYX', '04-20-2013', 'TRUE', 'DOC102');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INV08ZB', '04-20-2013', 'TRUE', 'DOC103');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INV29CB', '04-25-2013', 'TRUE', 'DOC103');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INV57BZ', '04-25-2013', 'TRUE', 'DOC103');

INSERT INTO INVOICES (INV_SN, INV_DATE, INV_PAID, PED_ID) VALUES ('INV8Z01', '04-27-2013', 'TRUE', 'DOC104');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMZZZ', 'ALLOCATED', 'DOC101');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMSIX', 'ALLOCATED', 'DOC101');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMPQ9', 'ALLOCATED', 'DOC101');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMGUX', 'ALLOCATED', 'DOC101');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITM192', 'ALLOCATED', 'DOC102');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITM7Z7', 'ALLOCATED', 'DOC102');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMA91', 'RELEASED', 'DOC103');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITM013', 'RELEASED', 'DOC104');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMPZX', 'RELEASED', 'DOC104');

INSERT INTO ITEMS (ITEMS_SN, ITEMS_STATUS, PED_ID) VALUES ('ITMB0K',

```
'RELEASED','DOC104');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDIZE', '01-04-2013', 'TRUE', 'DOC101');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORD293', '01-04-2013', 'TRUE', 'DOC101');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDBIX', '01-04-2013', 'TRUE', 'DOC102');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORD87X', '01-04-2013', 'TRUE', 'DOC102');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDGSE', '01-10-2013', 'TRUE', 'DOC103');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDHCW', '01-10-2013', 'TRUE', 'DOC103');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORD082', '01-15-2013', 'TRUE', 'DOC103');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDZZX', '01-15-2013', 'TRUE', 'DOC104');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDFFE', '01-15-2013', 'TRUE', 'DOC104');
```

```
INSERT INTO ORDERS (ORD_SN, ORD_DATE, ORD_PROCESSED, PED_ID) VALUES ('ORDB00', '01-24-2013', 'TRUE', 'DOC105');
```

-----EPCIS out-line for SQL Report Scripts-----

Success with providing information through an ASN report that supported a manufacturer's decision to ship pharmaceuticals to a retailer.

-show all orders processed, items allocated, and invoices paid after this date

```
SELECT O.ORD_PROCESSED, I.ITEMS_STATUS,
```

Success with providing information through a Containers report that gave the manufacturer lot information about a specific pharmaceutical shipment.

-show all containers shipped and items allocated on this date

Success with providing information through an Invoice report that supported a manufacturer's decision to bill a retailer for a pharmaceutical shipment.

-show all orders processed, all items allocated, all containers shipped, and all ASN have been acknowledged after this date.

Success with providing information through an Items report that gave the manufacturer or retailer product identification about a specific pharmaceutical.

- show all items released

Success with providing information through an Order report that supported a retailer's decision to purchase pharmaceuticals from a manufacturer.

- show all containers received after this day

Success with providing information through an Electronic Pedigree that allowed a manufacturer or retailer to track and track pharmaceuticals within the supply chain.

- show pedigrees after this day