

Index	Rule
1	$\forall x, y \text{ @Network_A:officeSoftware}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
2	$\forall x, y \text{ @Network_A:officeSoftware}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
3	$\forall x, y \text{ @Network_A:operationSoftware}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
4	$\forall x, y \text{ @Network_A:operationSoftware}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
5	$\forall x, y \text{ @Network_A:FtpServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
6	$\forall x, y \text{ @Network_A:FtpServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
7	$\forall x, y \text{ @Network_A:webServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
8	$\forall x, y \text{ @Network_A:webServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
9	$\forall x, y \text{ @Network_A:sshServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
10	$\forall x, y \text{ @Network_A:sshServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
11	$\forall x, y \text{ @Network_A:telnetServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
12	$\forall x, y \text{ @Network_A:telnetServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
13	$\forall x, y \text{ @Network_A:otherServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:name}(x, y)$
14	$\forall x, y \text{ @Network_A:otherServer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:software}(x) \wedge \text{@@Network_B:type}(x, y)$
15	$\forall x, y \text{ @Network_A:computer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:pc}(x) \wedge \text{@@Network_B:name}(x, y)$
16	$\forall x, y \text{ @Network_A:computer}(x) \wedge \text{String}(y) \wedge \text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:pc}(x) \wedge \text{@@Network_B:type}(x, y)$
17	$\forall x, y \text{ @Network_A:switchequip}(x) \wedge \text{String}(y) \wedge \text{@Network_A:name}(x, y) \rightarrow \text{@@Network_B:switch}(x) \wedge \text{@@Network_B:name}(x, y)$

Table 1: Mappings From Network A To Network B Databases: Part 1

Index	Rule
18	$\forall x, y \text{ @Network_A:switchequip}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_A:type}(x, y) \rightarrow \text{@@Network_B:switch}(x) \wedge$ $\text{@@Network_B:type}(x, y)$
19	$\forall x, y \text{ @Network_A:networkNode}(x) \wedge \text{@Network_A:networkNode}(y) \wedge$ $\text{@Network_A:nodePair}(x, y) \rightarrow \text{@Network_B:networkNode}(x) \wedge$ $\text{@Network_B:networkNode}(y) \wedge \text{@Network_B:pairOfNode}(x, y)$
20	$\forall x, y \text{ @Network_A:networkNode}(x) \wedge \text{@Network_A:networkNode}(y) \wedge$ $\text{@Network_A:connectedto}(x, y) \rightarrow \text{@Network_B:networkNode}(x) \wedge$ $\text{@Network_B:networkNode}(y) \wedge \text{@Network_B:connectedto}(x, y)$
21	$\forall x, y \text{ @Network_A:networkNode}(x) \wedge \text{@Network_A:software}(y) \wedge$ $\text{@Network_A:installed_software}(x, y) \rightarrow \text{@Network_B:networkNode}(x) \wedge$ $\text{@Network_B:software}(y) \wedge \text{@Network_B:hasSoftware}(x, y)$

Table 2: Mappings From Network A To Network B Databases: Part 2

Index	Rule
1	$\forall x, y \text{ @Network_B:coax}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:name}(x, y) \rightarrow \text{@Network_A:cable}(x) \wedge$ $\text{@Network_A:name}(x, y)$
2	$\forall x, y \text{ @Network_B:coax}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:type}(x, y) \rightarrow \text{@Network_A:cable}(x) \wedge$ $\text{@Network_A:type}(x, y)$
3	$\forall x, y \text{ @Network_B:crossover}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:name}(x, y) \rightarrow \text{@Network_A:cable}(x) \wedge$ $\text{@Network_A:name}(x, y)$
4	$\forall x, y \text{ @Network_B:crossover}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:type}(x, y) \rightarrow \text{@Network_A:cable}(x) \wedge$ $\text{@Network_A:type}(x, y)$
5	$\forall x, y \text{ @Network_B:straightthrough}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:name}(x, y) \rightarrow \text{@Network_A:cable}(x) \wedge$ $\text{@Network_A:name}(x, y)$
6	$\forall x, y \text{ @Network_B:straightthrough}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:type}(x, y) \rightarrow \text{@Network_A:cable}(x) \wedge$ $\text{@Network_A:type}(x, y)$
7	$\forall x, y \text{ @Network_B:pc}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:name}(x, y) \rightarrow \text{@Network_A:computer}(x) \wedge$ $\text{@Network_A:name}(x, y)$
8	$\forall x, y \text{ @Network_B:pc}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:type}(x, y) \rightarrow \text{@Network_A:computer}(x) \wedge$ $\text{@Network_A:type}(x, y)$
9	$\forall x, y \text{ @Network_B:switch}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:name}(x, y) \rightarrow \text{@Network_A:switchequip}(x) \wedge$ $\text{@Network_A:name}(x, y)$
10	$\forall x, y \text{ @Network_B:switch}(x) \wedge \text{String}(y) \wedge$ $\text{@Network_B:type}(x, y) \rightarrow \text{@Network_A:switchequip}(x) \wedge$ $\text{@Network_A:type}(x, y)$
11	$\forall x, y \text{ @Network_B:networkNode}(x) \wedge \text{@Network_B:networkNode}(y) \wedge$ $\text{@Network_B:pairOfNode}(x, y) \rightarrow \text{@Network_A:networkNode}(x) \wedge$ $\text{@Network_A:networkNode}(y) \wedge \text{@Network_A:nodePair}(x, y)$
12	$\forall x, y \text{ @Network_B:networkNode}(x) \wedge \text{@Network_B:networkNode}(y) \wedge$ $\text{@Network_B:connectedTo}(x, y) \rightarrow \text{@Network_A:networkNode}(x) \wedge$ $\text{@Network_A:networkNode}(y) \wedge \text{@Network_A:connectedTo}(x, y)$
13	$\forall x, y \text{ @Network_B:networkNode}(x) \wedge \text{@Network_B:software}(y) \wedge$ $\text{@Network_B:hasSoftware}(x, y) \rightarrow \text{@Network_A:networkNode}(x) \wedge$ $\text{@Network_A:software}(y) \wedge \text{@Network_A:software_installed}(x, y)$

Table 3: Mappings From Network B To Network A Databases