PROCESS NODES PROCESS REGULATION **ENTITY POOL NODES** Process Metabolite Protein Macromolecule Metabolite Simple chemical Metabolite Protein (Metabolic reaction) Catalysis N:2 Metabolite Metabolite Protein Multimer Metabolite Protein Metabolite Complex ct:gene Protein Nucleic acid feature: Process Gene Metabolite Metabolite Protein (Metabolic reaction) gene Inhibition ct:mrna Nucleic acid feature: Process mRNA LABEL Perterbing agent Protein Protein Protein Protein mRNA (State transition) Empty set LABEL (previously -**Unspecified entitty** Protein Protein Omitted process Protein source/sink) Stimulation **AUXUILIARY UNITS** Unkown process Protein Protein Protein Protein State variable: State variable: Degradation Protein Protein Protein Protein unchanged/default phosphorylated Modulation N:2 State variable: State variable: Homodimer unchanged/default Protein Protein Protein phosphorylated Protein Protein Protein formation at threonine 14 at threonine 14 @Thr14 P@Thr14 ct:gene State variable: State variable: Protein Protein Protein Gene ubiquitinated acetylated Protein Necessary stimulation **Association** (transctiption) ct:mrna Protein State variable: State variable: Protein Protein Protein mRNA glycosylated hydroxylated ct:mrna State variable: State variable: mRNA Protein Protein Protein methylated myristoylated Protein Necessary stimulation Dissociation (translation) Protein State variable: State variable: Protein Protein Protein Protein prenylated palmytoylated State variable: State variable: LABEL Phenotype Protein Protein protonated sulfatied (н) (s) ct:gene ct:mrna Unit of information: Unit of information: LOGIC OPERATORS mRNA Gene conceptual type conceptual type messenger RNA gene ct:tss ct:grr Protein Protein Protein Unit of information: Unit of information: conceptual type -Start site conceptual type -Gene region gene regulatory region transcription start site OR (NOT OR operator NOT operator N:3 ct:coding Unit of information: Unit of information: conceptual type -Protein Gene region Protein Protein Protein Protein multimer cardinality gene coding region CONTAINER NODE **ENCAPSULATION NODE** Protein Protein Protein (AND) ≡ AND operator Protein Equivalence operator LABEL Compartment Submap LABEL Protein Protein Protein