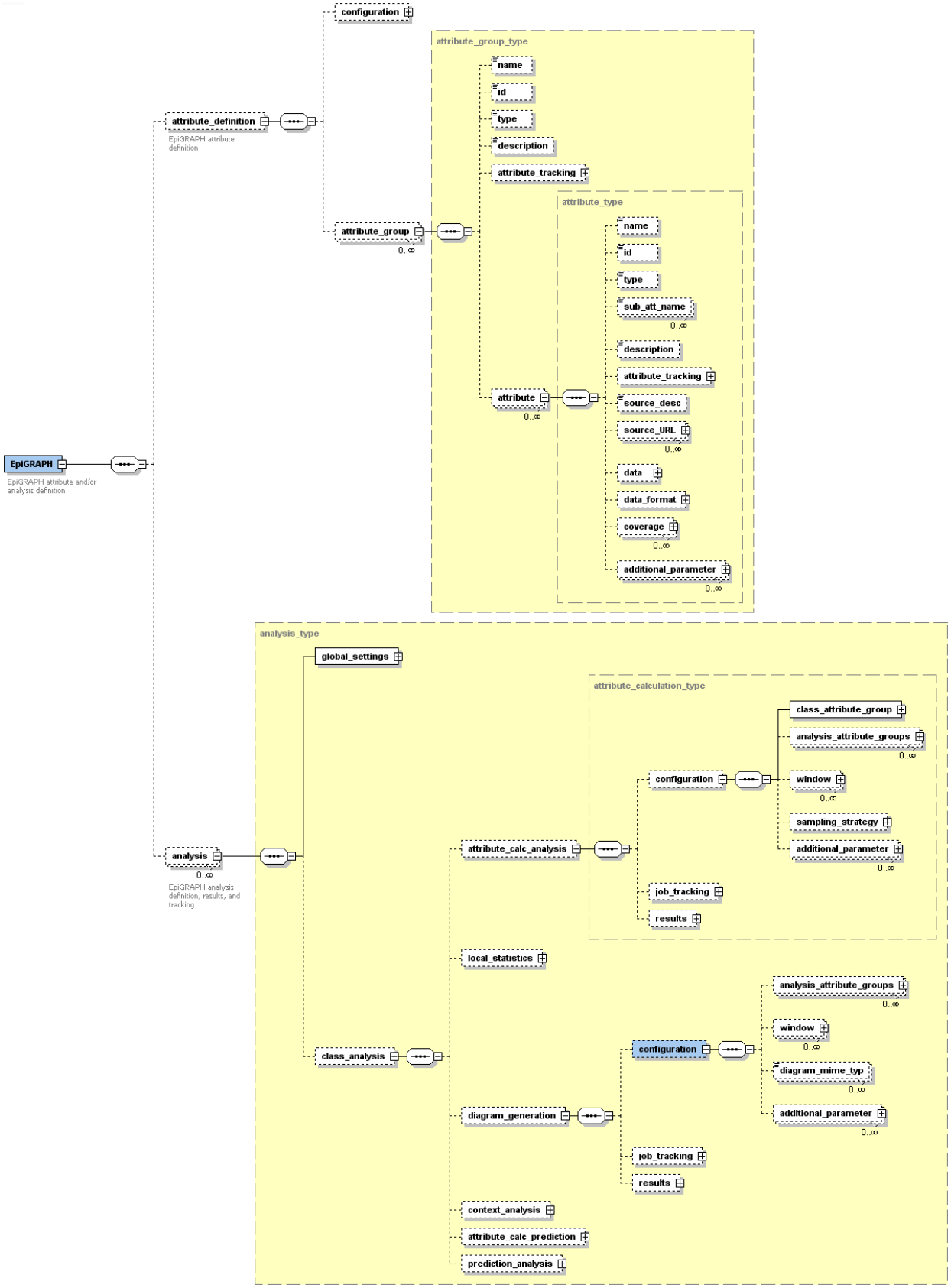
Illustration of the X-GRAF File Format

A. Overview of the XML schema definition specifying the X-GRAF format



B. Example of an X-GRAF-compatible XML file documenting an EpiGRAPH analysis

```
<?xml version = '1.0' encoding = 'ISO-8859-1'?>
<EpiGRAPH xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://epigraph.mpi-inf.mpg.de/X-GRAF-1.00
http://epigraph.mpi-inf.mpg.de/X-GRAF-1.00">
  <attribute_definition>
    <configuration>
      <genome>hg18</genome>
      <attribute_owner>
        <name>cbock</name>
        <password>***</password>
        <notification_email>cbock@mpi-inf.mpg.de</notification_email>
      </attribute_owner>
      <attribute_tracking>
        <status>available</status>
        <submission_date>2008-04-08T19:18:04.634000+02:00</submission_date>
      </attribute_tracking>
      <additional_parameter>
    </configuration>
    <attribute_group>
      <name>User_Attributes_Attached</name>
      <id>080408_191804_95923744</id>
      <attribute_tracking>
        <status>available</status>
        <submission_date>2008-04-08T19:18:04.634000+02:00</submission_date>
      </attribute_tracking>
      <attribute>
        <name>DNA_Methylation_Lymphocytes</name>
        <id>080408_191804_919137651</id>
        <description>CpG island methylation data for chromosome 21 in human lymphocytes as reported in 'Yamada et al. (2004) Genome Res'</description>
        <data>
          <tabsep_table><embedded_data>
            CpG_island_identifier   chrom_hg18    chromstart_hg18 chromend_hg18  length  isMethylated
             #1 (NT_002836.4 740746-742525) chr21   13998895    14000167    1272    1
             #2 (NT_002836.4 798428-799837) chr21   14056070    14057479    1409    1
             [et cetera]
           </embedded_data></tabsep_table>
        </data>
        <data_format>
          <attribute_format>
          <column_information>
        </data_format>
        <coverage>
      </attribute>
    </attribute_group>
  </attribute_definition>
  <analysis>
    <global_settings>
    <class_analysis>
      <attribute_calc_analysis>
        <configuration>
          <class_attribute_group>
            <name>User_Attributes_Attached</name>
            <id>080408_191804_95923744</id>
            <attribute>
              <name>DNA_Methylation_Lymphocytes</name>
              <id>080408_191804_919137651</id>
              <sub_att_name>isMethylated</sub_att_name>
            </attribute>
          </class_attribute_group>
          <analysis_attribute_groups>
            <name>DNA_Sequence</name>
            <id>hg18_A</id>
          </analysis_attribute_groups>
          <analysis_attribute_groups>
            <name>DNA_Structure</name>
            <id>hg18_B</id>
          </analysis_attribute_groups>
          <window>
        </configuration>
        <job_tracking>
        <results>
      </attribute_calc_analysis>
      <local_statistics>
      <diagram_generation>
      <context_analysis>
      <attribute_calc_prediction/>
      <prediction_analysis/>
    </class_analysis>
  </analysis>
</EpiGRAPH>
```

Documentation of EpiGRAPH analyses in the X-GRAF format

This figure illustrates the XML Genomic Relationship Analysis Format (X-GRAF), which is the data format used by EpiGRAPH to keep track of all analyses and attributes. Panel A displays an outline of the XML schema definition that defines the format and which is used to validate every submitted EpiGRAPH analysis request. Panel B displays an excerpt of an XML analysis documentation conforming to the X-GRAF format. This XML file was generated by EpiGRAPH as result of the analysis described in video tutorial 1 (see http://epigraph.mpi-inf.mpg.de/videos/) and downloaded from the results overview page.