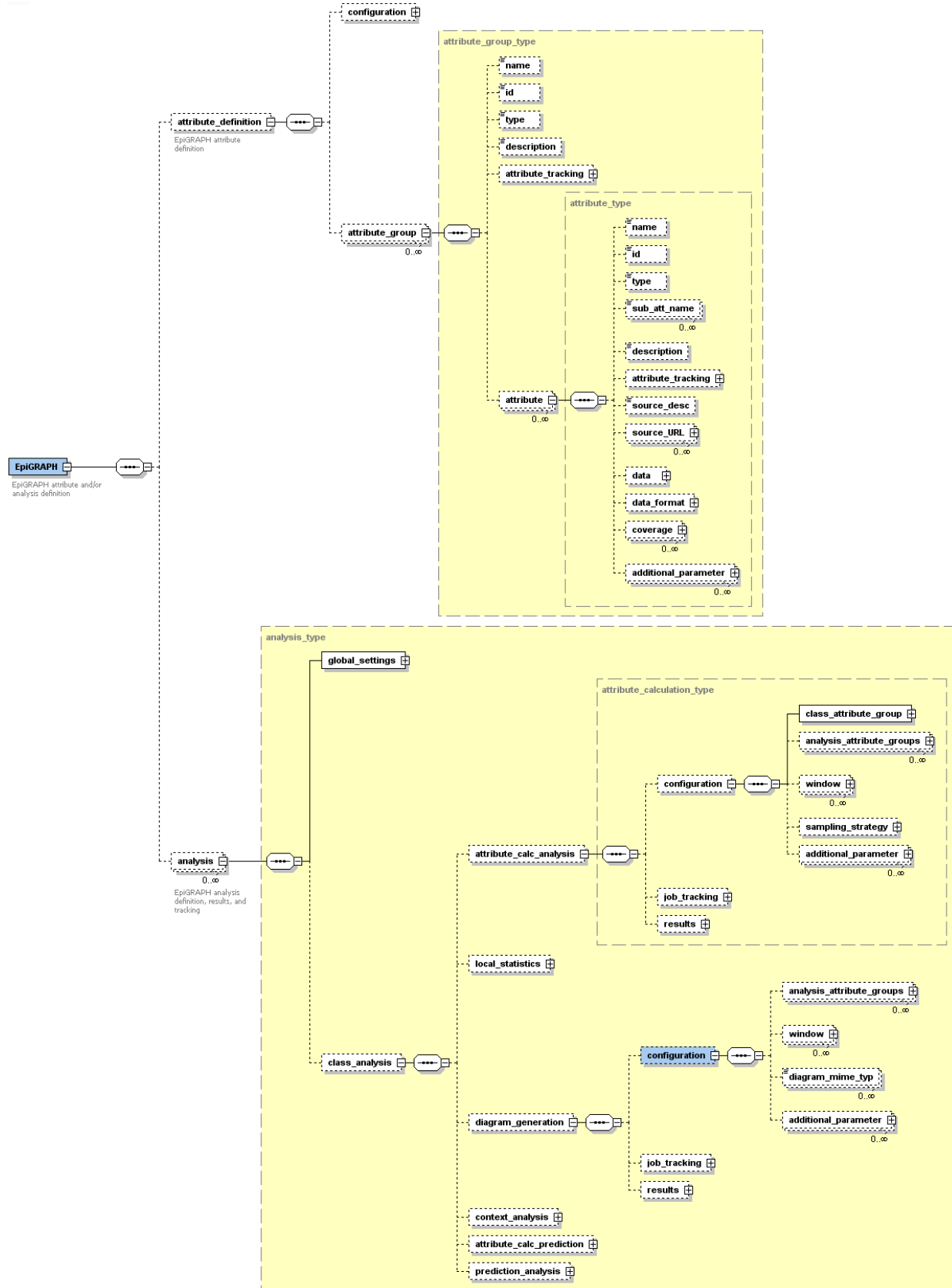


Illustration of the X-GRAF File Format

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



B. Example of an X-GRAP-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-GRAP-1.00
http://epigraph.mpi-inf.mpg.de/X-GRAP-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>
      </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>
            </column_information>
          </data_format>
          <coverage>
          </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>
            </window>
          </configuration>
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          <results>
          </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-GRAP format

This figure illustrates the XML Genomic Relationship Analysis Format (X-GRAP), 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-GRAP 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.