

Value of CPA negotiation

CPA formation describes the overall process of generating a final CPA from two CPP's and is further composed of the CPA composition and CPA negotiation process.

The CPA composition process can be viewed as a mechanical matching algorithm. This algorithm matches and checks corresponding elements and attributes of two CPP's. All elements and attributes which do match, are copied to a new CPA template. All errors relating to non-matches are added into a gap list. Any problems in obtaining a CPA during the first step will be tackled in the CPA negotiation.

The CPA negotiation process provides the means to negotiate for a final CPA. The Automated Negotiation of Collaboration Protocol Agreement (ANCPA) specification, current version 0.10, specifies the CPA negotiation. The CPA negotiation itself is as an ebXML application, including an ebXML Business Process, an ebXML CPA between two negotiation party's, and ebXML messages. The ANCPA specification provides a Negotiation Business Process (NBP), a Negotiation CPA (NCPA), Negotiation Messages and various negotiation rules.

Further, the ANCPA Specification introduces the Negotiation Description Document (NDD). An NDD is an XML document, which lists negotiable information items and is associated with a CPP or CPA template. An NDD for a CPP is typically used in a CPA composition where as the NDD for a CPA template is used in a CPA negotiation. The negotiable information items not only reference the elements and attributes of a CPP or CPA template (which are in turn negotiable) but also provides negotiation information such as preferences for values, ranges of values and mandatory elements and attributes. The NDD is important as only elements and attributes which are referenced in the NDD are open for negotiation.

The CPA negotiation starts with the first party sending a new CPA template and its associated NDD to the second party. This first message is called the initial offer. It is then up to the second party to either accept the initial offer, reject it or provide a new counter offer. The negotiation messages are used to send the initial offer and all following counter offers. In such a negotiation message, individual negotiable information items can be accepted, updated, added or removed (only if the NDD allows so).

The ANCPA Specification aims to reach a final, ready-to-go CPA by negotiating with counter offers with counter offers until all negotiable information items have been solved. There is always the possibility of utilising human intervention to finalise a CPA.

The formation of a CPA from two CPP's is an important aspect of the ebXML framework. The CPA negotiation provides the means to reach this goal.