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Part 1: Reference model

Télécommunications et échange d'information entre systèmes — Architecture récursive inter-réseaux —

Partie 1: Modèle de référence

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Foreword

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Introduction

The purpose of this document is to provide a reference model for the concepts in Recursive Inter-Network Architecture (RINA)[1],[2]. This document provides the fundamental definitions for the ISO/IEC 4396 series. It defines an architecture.

This document is the high-level description of the concepts, the elements and how they work. This is a top-level specification, not a tutorial. Other more detailed specifications will draw on the ISO/IEC 4396 series as their starting point.

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Telecommunications and information exchange between systems — Recursive inter-network architecture —

Part 1: Reference model

1 Scope

This document provides the reference model for the Recursive Inter-Network Architecture (RINA). It describes:

— the basic concepts of distributed systems and distributed applications;

— distributed management systems (DMSs);

— the fundamental structure of distributed Inter-Process Communications;

— the Distributed Inter-Process Facility (DIF) operations.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
address
identifier that is a synonym for the fully qualified IPC-Process-Instance-name, which is a member of a *distributed-IPC-facility (DIF)* (3.32)

Note 1 to entry: An address is only unambiguous within the DIF (and is assigned by the DIF). This identifier can be assigned to facilitate its usefulness to the operation of the DIF, i.e. location-dependent.

3.2
application connection
shared state maintained by two communicating peer *application entities (AEs)* (3.3)

Note 1 to entry: Application connections go initially through an establishment phase, in which enough data is exchanged to establish a shared understanding between both AEs, to later proceed to the data transfer phase, in which both AEs exchange data. In Recursive Inter-Network Architecture (RINA), the establishment phase is handled by *common application connection establishment procedure (CACEP)* (3.17), while the data transfer phase is the responsibility of *common distributed application protocol (CDAP)* (3.18).

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