

Web-based E-commerce Service Provisioning using a TINA Retailer

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Declaration

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Science in Engineering at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other university.

Shaun Brassell

Signed this _____ day of _____ (year) _____

Abstract

This project examines the use of TINA concepts to provide the required service architecture layer for the Next Generation Network. In particular, it details how the current Internet-based e-commerce environment could be integrated as a service within the TINA NGN solution. A prototype service in the form of a virtual shopping mall provides the context for this development. The presented model allows for seamless integration with existing Internet e-commerce solutions whilst providing a number of additional value-added services.

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Acronyms

TINA	Telecommunications Information Network Architecture
NGN	Next Generation Network
OSM	Open Service Marketplace
WWW	World Wide Web
DPE	Distributed Processing Environment
CORBA	Common Object Request Broker Architecture
OMG	Object Management Group
IDL	Interface Definition Language
IIOP	Internet Inter-Orb Protocol
IOR	Interoperable Object Reference
HTTP	Hyper Text Transfer Protocol
API	Application Programming Interface
IN	Intelligent Network
ISP	Internet Service Provider
B2B	Business to Business
B2C	Business to Consumer
VSM	Virtual Shopping Mall
IA	Initial Agent
UA	User Agent
SUB	Subscription Management Component
SF	Service Factory
PA	Provider Agent
SSM	Service Session Manager
USM	User Session Manager
ssUAP	Service Session User Application
Ret-RP	Retailer Reference Point
3Pty	Third Party Reference Point

