

# UC2000 Product Introduce

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- This course is mainly:
  - Describe what is UC2000
  - Explain why we need UC2000 in VoIP network
  - Explain Dinstar UC2000 product function and key feature
  - Introduce Dinstar UC2000 application scenario

# Course Objective



Understand and know what is UC2000



Be familiar with UC2000 main function



Know Dinstar UC2000 product and application

Through this course  
you will be able to

# Contents

- 1 Chapter One About UC2000
- 2 Chapter Two UC2000 Introduce
- 3 Chapter Three The UC2000 Application Scenarios
- 4 Chapter Four Deployment Case Study

# Chapter One About UC2000

01



## 1.1 What is UC2000



## 1.2 Why need UC2000

# What is UC2000

- GSM/3G/4G VoIP Gateway

It is a professional device that integrates mobile communication and Voice over IP technology, which realizes the seamless connection between traditional cellular network and IP telephone system.

## Core Definition

The UC2000 series VoIP gateways are embedded systems. The primary function of the UC2000 wireless voice gateway is to forward voice or SMS messages from the IP side to the mobile network of a SIM card, or to convert voice and SMS messages originating from a SIM card into IP packets, which are then forwarded to the IP network via the Ethernet port on the network side.



# Why need UC2000



## For Call centers

Dinstar GSM/WCDMA/LTE VoIP gateways support to route VoIP calls to landline/mobile phone within the 2G/3G/4G mobile networks, provide a wide range of call cost-saving solutions for call centers, to increase answer rates from end users, and offer new effective operation methods for call centers

## For SMS

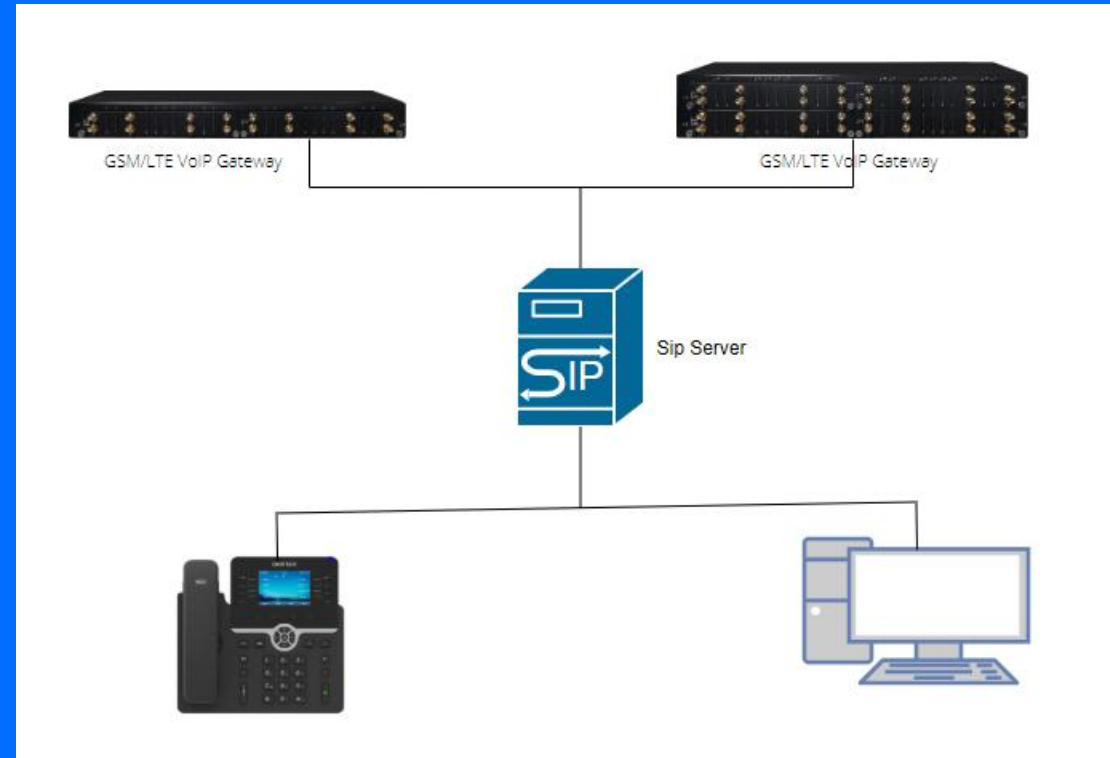
SMS is still an active way to interacting people as it reaches mobile users directly. SMS notifications is important for industrial users like schools, governments. Moreover, as SMS is also an effective marketing tool, Service providers or marketing company are offering SMS marketing as one of their services. Dinstar provide GSM/WCDMA/LTE gateways, SIMBank and SIMCloud for SMS solutions for simple or complex applications, at an optimized cost.



# For Call Centers

- Advantages

- ✓ Easy to implement and increase productivity
- ✓ Increase customer contact rate
- ✓ Powerful SMS tools for improved customer reach SMS, Email2SMS and SMS2Email and Voice capabilities
- ✓ Centralized management for calls and SIM cards
- ✓ No need to make changes in your telecom existing infrastructure

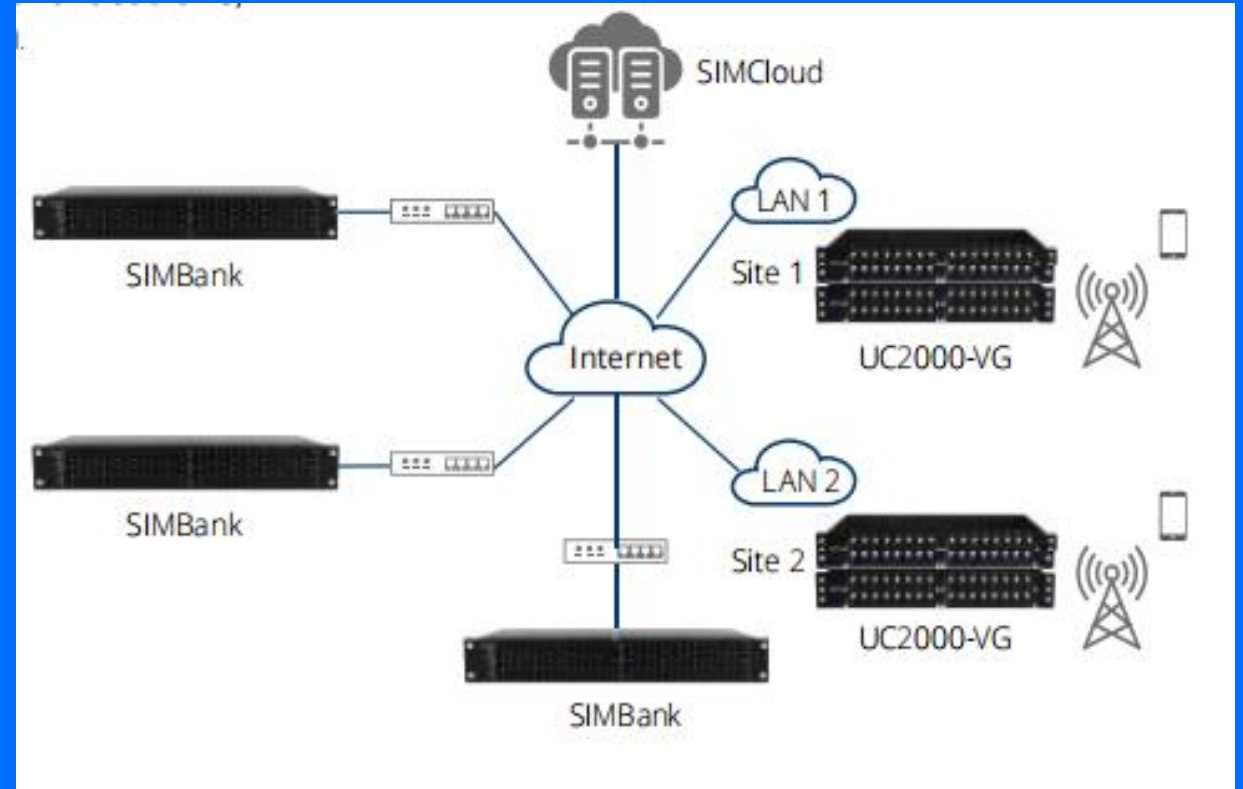




# For SMS

- Advantages

- ✓ Cost saving: Always use SIM cards with cheapest rate; SMS counter to avoid big bills.
- ✓ Integrate with your SMS application easily with our flexible API.
- ✓ Scalable architecture: Grow with your businesses
- ✓ Save your management cost: No need to travel to different location to manage SIMs, save the cost of on-site technicians
- ✓ Increase your customer awareness and loyalty via SMS marketing



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# Chapter Two UC2000 Introduce

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## 2.1 Dinstar UC2000 Overview



## 2.2 UC2000 Serial Products Introduce

# Dinstar UC2000 Overview

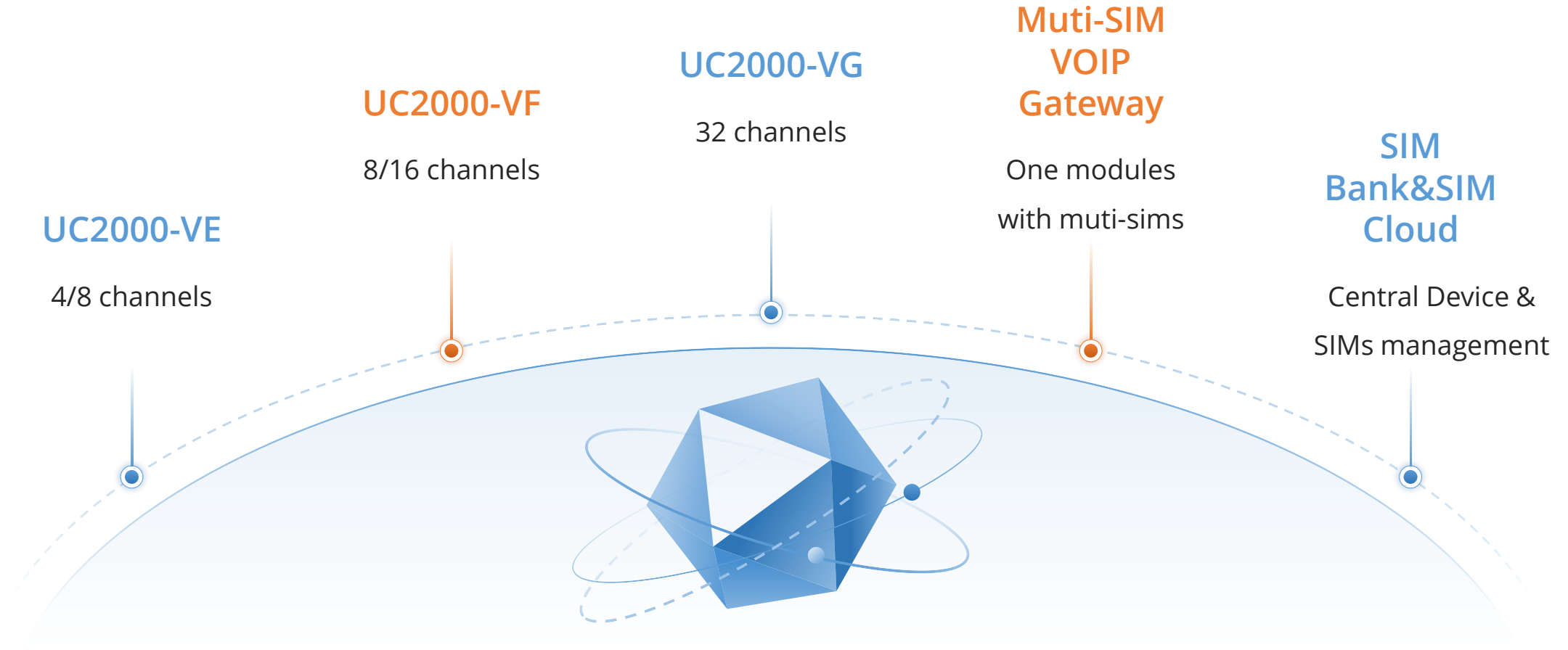


- Key Feature

- Compatible with LTE-FDD/LTE-TDD/WCDMA/GSM Networks
- Compatible with Mainstream VoIP Platform
- Hot Swappable SIM Cards
- Voice over LTE (VoLTE)
- HTTP API for SMS Application Integration
- HTTP API for SMS Application Integration
- SMS to Email & Email to SMS
- Auto CLIP
- Remote SIMs Management (optional)
- Powerful Embedded CPUFlexible
- Flexible Dial Rules&Manipulation Rules

# UC2000 Serial Products Introduce

**DINSTAR**



# UC2000-VE

DINSTAR

- 4/8 Channels for GSM or LTE



4 or 8 channels  
for GSM or LTE



SMS/USSD/PIN



Open VPN

**NAT**

STUN, Dynamic NAT,  
Static NAT



Call Waiting



Remote sim



Front View



Back View

# UC2000-VF

DINSTAR

- 8/16 Channels for GSM or LTE



8 or 16 channels  
for GSM or LTE



SMS/USSD/PIN



Open VPN

**NAT**

STUN, Dynamic NAT,  
Static NAT



Call Waiting



Remote sim



Front View



Back View



# UC2000-VG

DINSTAR

- 32 Channels for GSM or LTE



32 channels for  
GSM or LTE



SMS/USSD/PIN



Open VPN

**NAT**

STUN, Dynamic NAT,  
Static NAT



Call Waiting



Remote sim



Front View



Back View

# UC2000-VF(V131)

DINSTAR

- 8 or 16 Channels for GSM or LTE
- 32 or 64 Sim Slots



8 or 16 channels  
for GSM or LTE



SMS/USSD/PIN



Open VPN

**NAT**

STUN, Dynamic NAT,  
Static NAT



Call Waiting



Remote sim



Front View



Back View

# UC2000-VG(V131)

DINSTAR

- 32 Channels for GSM or LTE
- 128 Sim Slots



32 channels for  
GSM or LTE



SMS/USSD/PIN



Open VPN

**NAT**

STUN, Dynamic NAT,  
Static NAT



Call Waiting



Remote sim



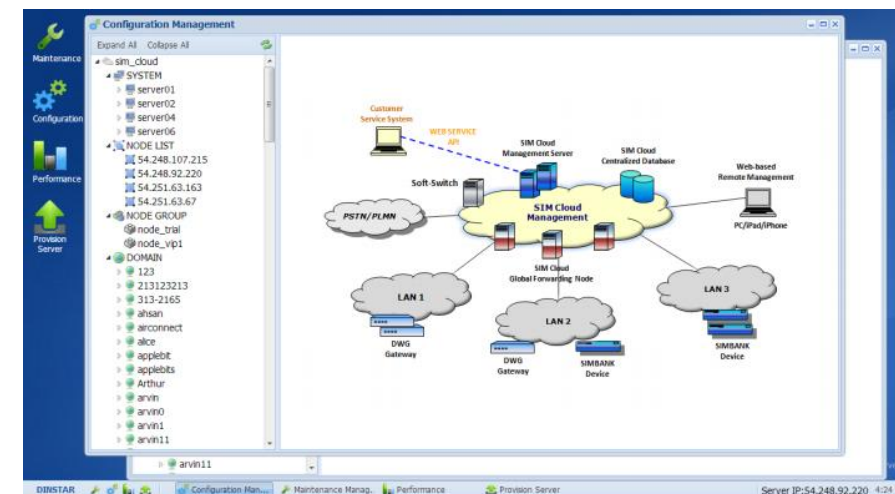
Front View



Back View

# SIM Bank&SIM Cloud

- Compatible with Dinstar GSM/3G/4G VoIP Gateway
- Manage multiple Dinstar GSM/3G/4G VoIP Gateway
- Control all your SIM cards in your office via IP
- Hot swappable SIM cards
- Flexible SIMs allocation
- Human behavior
- Auto balance check and top-up
- Open web-service API



SIM Cloud



SIM Bank

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# Chapter Three The UC2000 Application Scenarios

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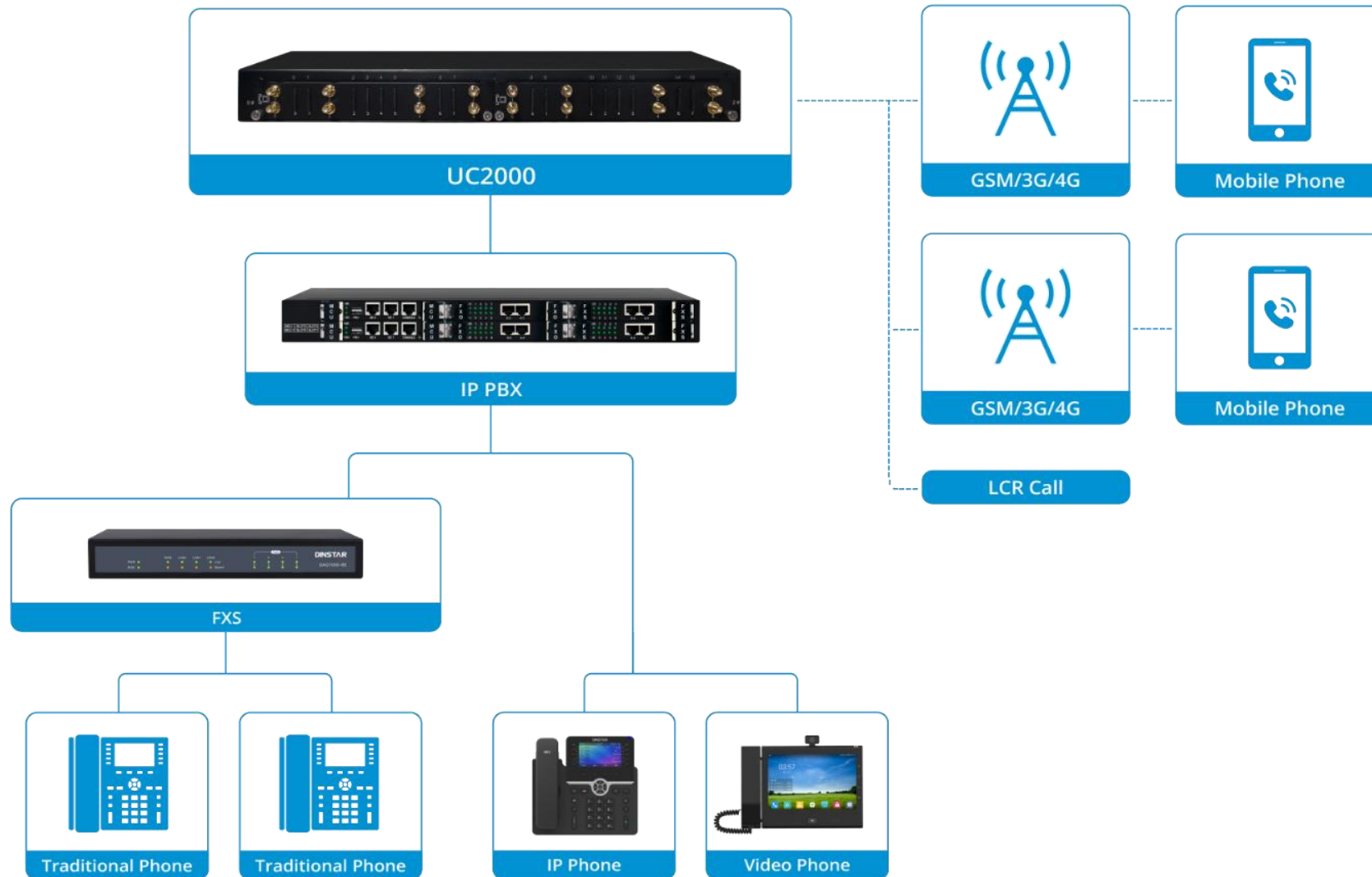
## 3.1 UC2000 Typical Network For Calls



## 3.2 UC2000 Typical Network For SMS

# UC2000 Basic Network

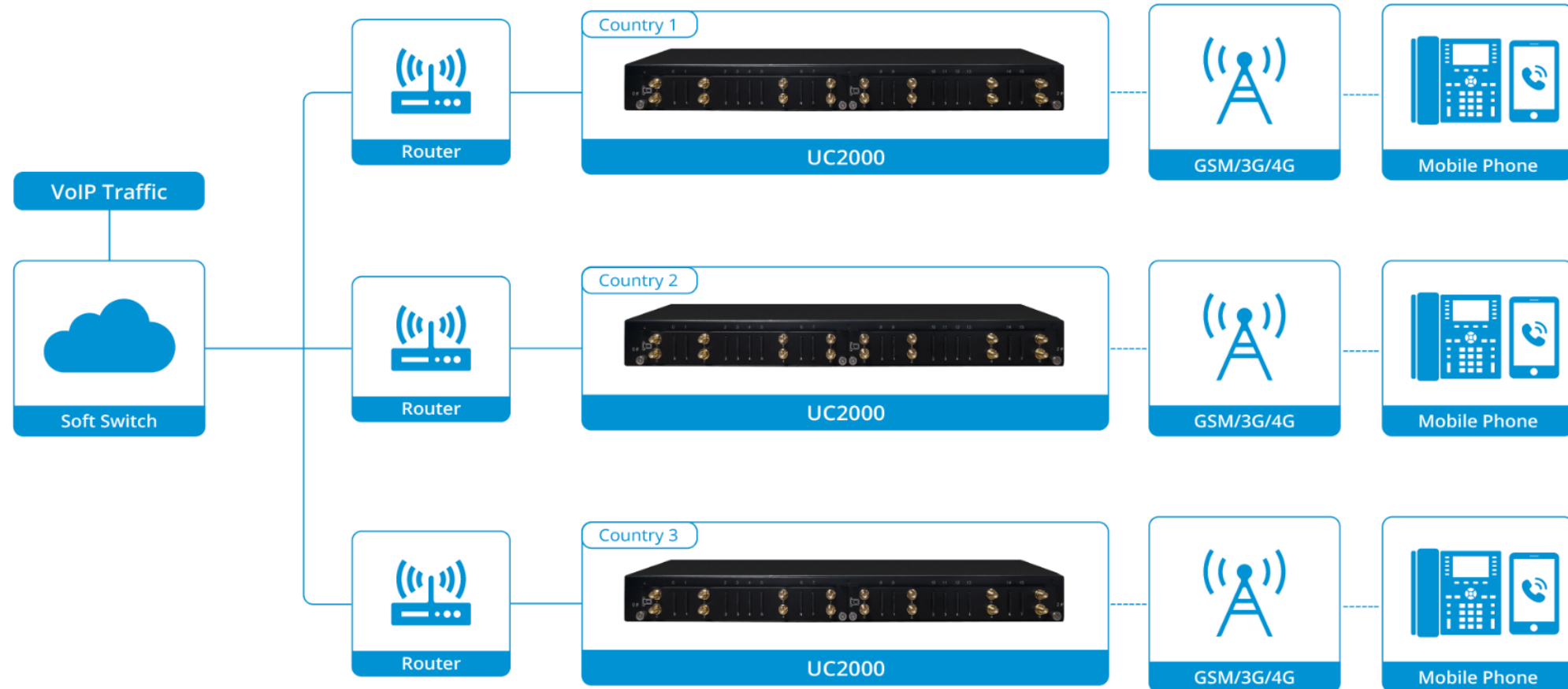
DINSTAR





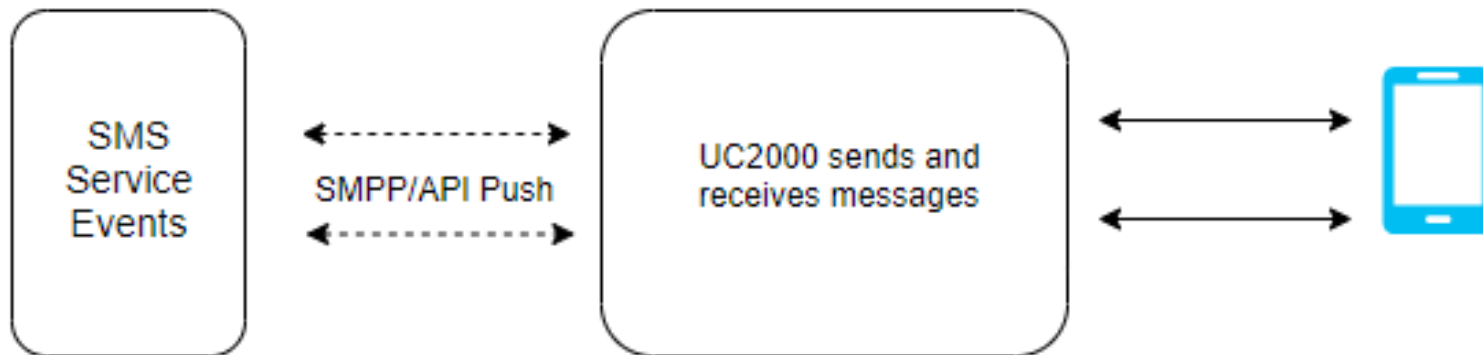
# Basic Network Architecture of Virtual Network Operators **DINSTAR**

- Deploy as Terminations



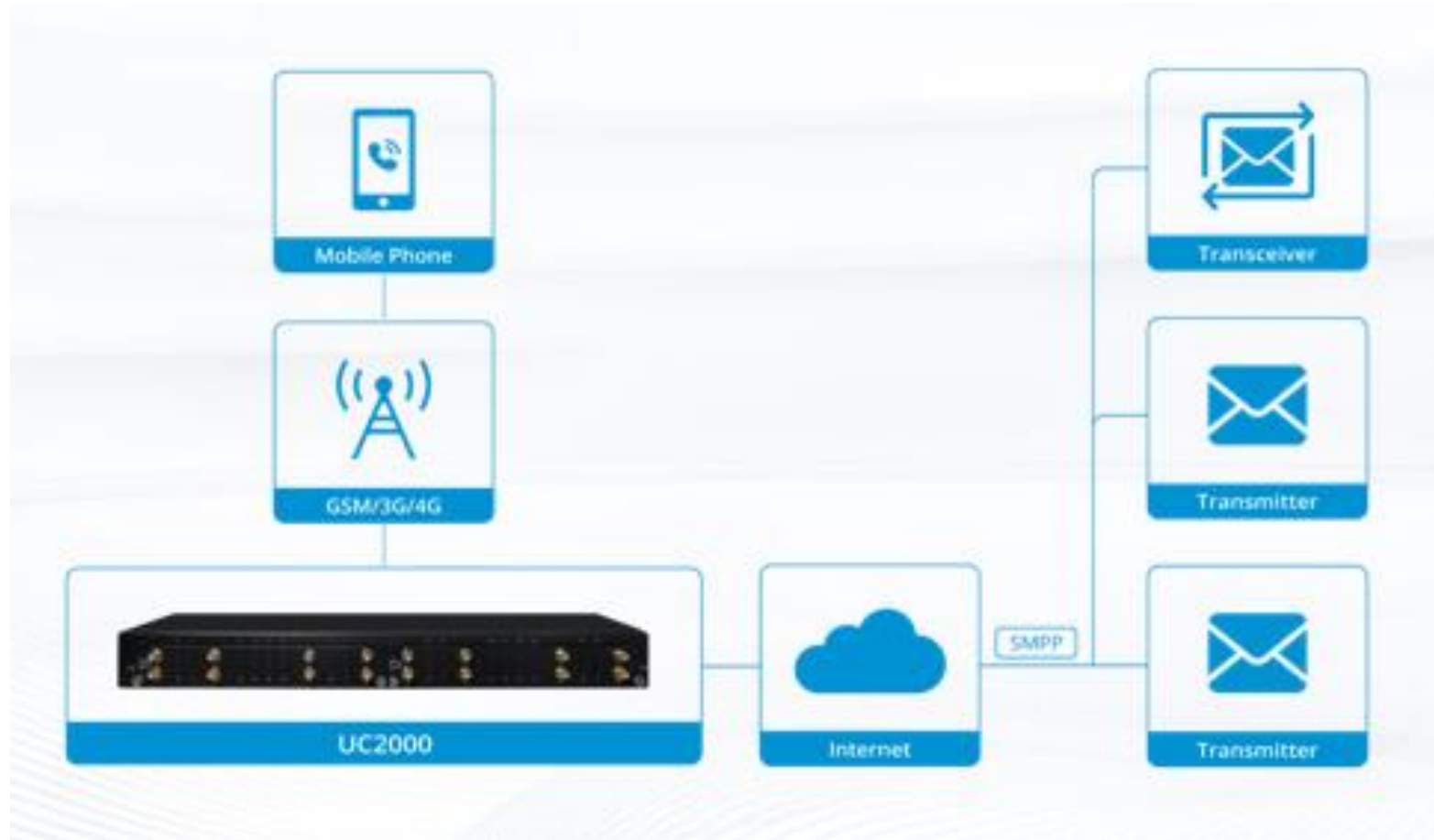
# SMS Service Functionality Description

- UC2000 supports sending SMS messages via API (HTTP).
- Supports network standards such as LTE/WCDMA/GSM/CDMA.
- Supports SMS to email functionality (SMPP service).



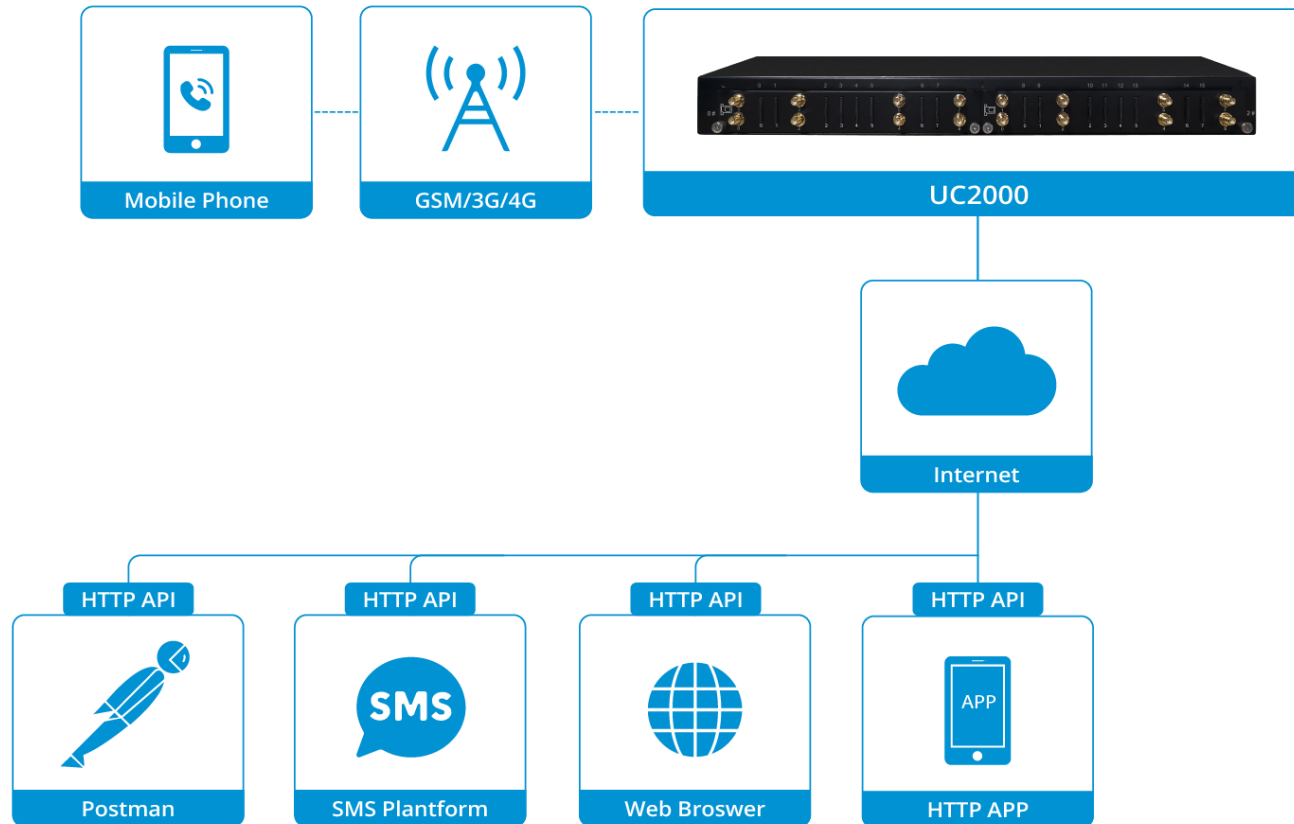
# SMS Basic Network

- Sending SMS via SMPP can be used in places where verification codes are received, etc.



# SMS Messages Service Function

- Uploaded via HTTP/HTTPS APIs, this method is frequently used for integrating SMS verification codes, such as for notifications related to high-speed rail tickets, flight tickets, hospital appointments, and other equipment alarm information.



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# Chapter Four UC2000 Case Study

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## 3.1 UC2000 Deployment Case Study

# A certain bank's customer service center implements SIM card usage.

- Deployment challenges

Difficulty of interoperability and interaction across distributions

01

Difficulties in applying for solid wire resources in various locations

02

Different carriers operate on different frequency bands in various regions

03

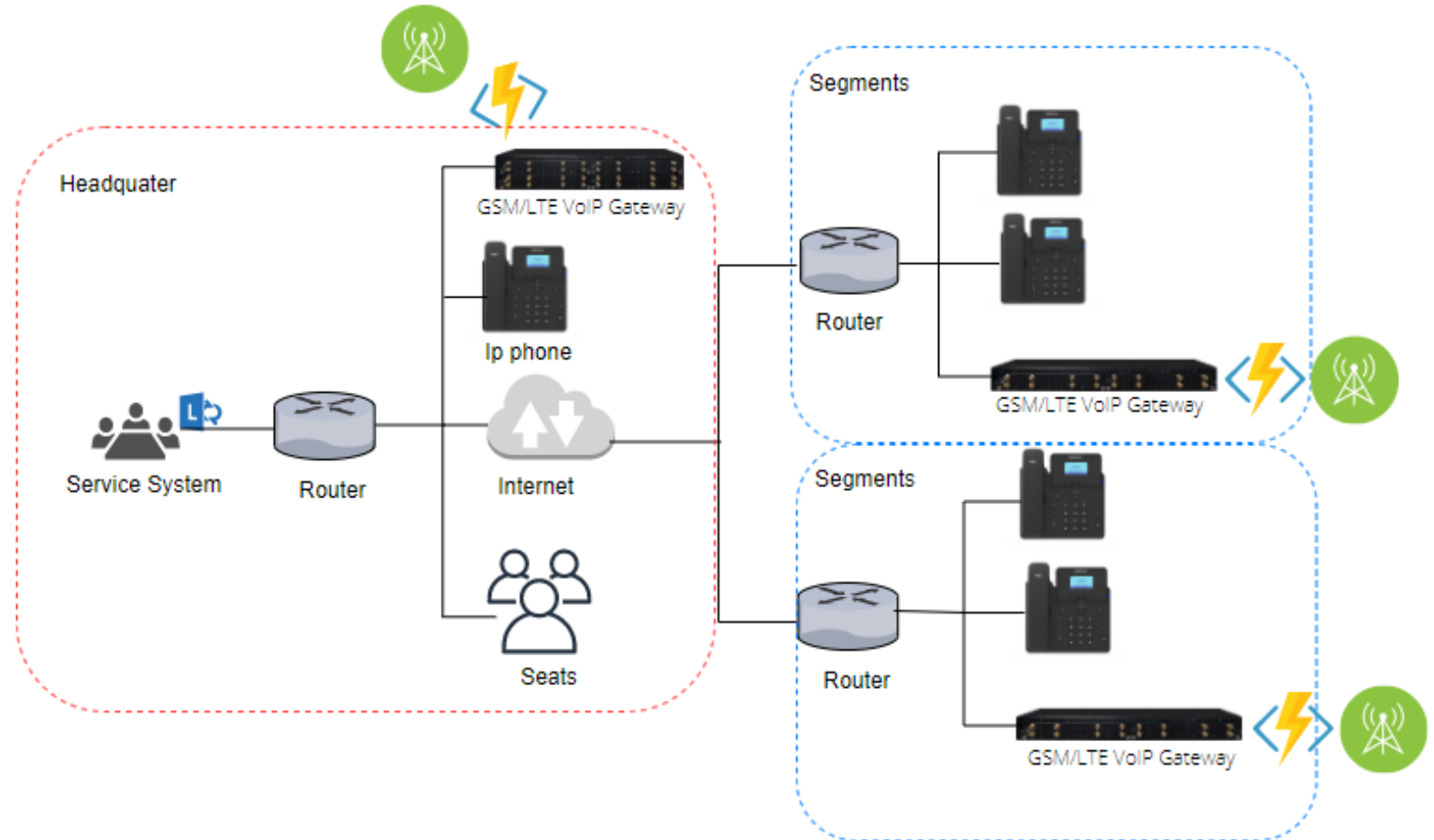
Different customer service representatives varies greatly by location.

04



# Dinstar Product Solutions

- ✓ Support GSM/CDMA /WCDMA/LTE network system;
- ✓ Mobile deployment is flexible and simple, enabling internal communication between headquarters and branches as well as external communication.
- ✓ Email to SMS / SMS to Email
- ✓ SMPP support on SMS gateways



# Summary

- This course we already learn:
  - What is UC2000 and why need UC2000
  - UC2000 main function and key feature
  - Dinstar UC2000 product knowledge
  - Dinstar UC2000 application scenario

# Abbreviation

- NAT:Network Address TranslationSRTP
- STUN:Session Traversal Utilities for NAT
- UDP:User Datagram Protocol
- TCP:Transmission Control Protocol



# THANKS



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