

PLATFORM EXTENSION · RELEASE 10.2

SMS Centre (SMSC)

Text messages on the messaging network itself — a direct SMPP bind, every number a person has, receipts and replies back in the report.

The **SMS Centre** extension binds the Universal Service Node directly to a short message service centre over SMPP 3.4, so text messages travel on the messaging network rather than through an e-mail-to-text relay: mass-notification texts go out to every number a person has, delivery receipts and replies come back into the report, and a moderator is texted when people are waiting on their bridge.

SMPP 3.4

transceiver bind to the SMS centre over TCP

4

telephone numbers texted per notification recipient

160

characters per notification text

5 min

ceiling on the reconnect back-off while a centre is down

What it does

A system administrator adds one or more SMS centres on the Platform Extensions > SMSC page: host, TCP port, system ID, password, system type, TON/NPI values, address ranges, keep-alive interval, and whether the link carries mobile-terminated (outbound) traffic, mobile-originated (inbound) traffic or both. A daemon per centre holds the bind, submits within an in-flight limit, honours the centre's throttling and reconnects with a back-off that doubles up to five minutes.

The applications queue the traffic: a mass notification with SMS selected texts each recipient on up to four numbers and records submission and delivery receipt per person in the report; a conference texts its moderator when participants are waiting. Inbound, a numeric reply from a notified number is recorded as that person's vote.

Why it matters

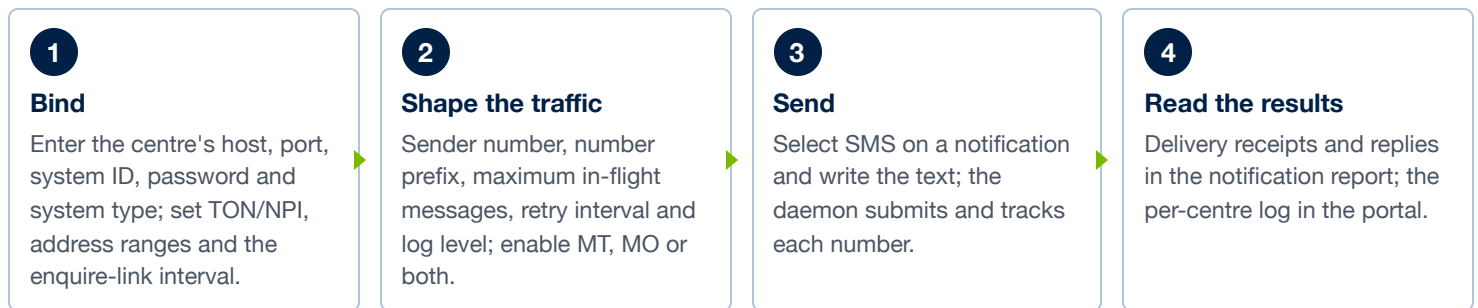
- ✓ A direct SMPP link — no e-mail-to-SMS relay in the path of an emergency text.
- ✓ Every number a person has, in one blast, with a delivery receipt per number.
- ✓ Two-way: replies come back as votes in the notification report.
- ✓ Throttling and reconnects handled by the daemon; one event per outage, not per retry.
- ✓ Several centres, each with its own bind, settings and log.
- ✓ Switchable to a hosted messaging gateway without touching a single notification.

How it works

Configured by a system administrator on the Platform Extensions > SMSC page; each centre has its own settings and log.



Notifications and conference alerts are queued to the SMPP bind; the centre delivers to every number, and receipts and replies come back into the report.



WHAT SENDS

UNIVERSAL SERVICE NODE

THE MESSAGING SIDE



One daemon per centre holds the bind; the applications queue messages to it, and receipts and replies travel back the same way into the reports.

Features and benefits

FEATURE	HOW IT WORKS	BENEFIT
SMPP 3.4 bind	The daemon binds as a transceiver to the centre's host and TCP port with system ID, password and system type, interface version 3.4, source TON/NPI and address ranges, and keeps the session alive with enquire_link at the configured interval.	A standard bind any SMS centre or aggregator accepts.
Several centres	Each SMSC entry runs its own daemon with its own bind, client and protocol settings, MT and MO switches and log; the list shows host, port, MO and MT; deleting a centre stops its daemon.	A primary and a second route, or one per country.
Outbound (MT) delivery	Messages are submitted up to the Max Allowed Messages in flight; a queue-full response from the centre throttles submission and retries; transient errors are retried and permanent ones failed with the centre's own status text.	The link is driven as hard as the centre allows — no harder.
Delivery receipts	The centre's receipt is matched to the recipient row by message ID, upgrading the outcome to delivered, expired, undeliverable or rejected; the match is also made from the database, so a daemon restart loses nothing.	The report says delivered, not merely sent.
Inbound (MO) replies	With MO enabled, a reply from a number the platform texted is matched to its account; a numeric body of up to four digits is stored as that recipient's vote on the latest notification and marks the message delivered; free text is ignored, and bodies never reach the log.	A keypad-style poll by text: reply 1 to accept.
Notification texts	A notification with SMS selected texts every recipient on phone 1 to 4 with its SMS text (160 characters) from the configured sender number, with number-prefix and international-prefix handling; each number and outcome appears in the report.	The short instruction reaches every pocket.
Conference alerts	When participants are waiting in a conference whose moderator has not joined, the moderator is texted the dial-in number and moderator code on every number in their profile.	The host is fetched, not the bridge abandoned.
Reconnection and logging	A lost bind is retried after the retry interval, doubling to five minutes; one log entry and one system event per outage and one on recovery. Each SMPP PDU is logged by header with its body redacted and credentials never written; the per-centre log has a viewer and download in the portal.	Diagnosable without exposing message content.
Provider switch	An Active SMS provider switch routes all outbound SMS either through the SMPP centres or through a hosted messaging gateway configured on the same page; the switch is immediate and reversible, and abandoned messages raise an SMS Fail system event either way.	Move between carrier and cloud without touching a notification.

Technical specifications

Bind

Protocol
Credentials

SMPP 3.4 transceiver bind over TCP
System ID (16 characters), password (64), system type (13)

Messages

Submit parameters

service_type, destination and source TON/NPI, ESM class, protocol ID, data coding



Addressing	Bind source TON and NPI; optional source and destination address ranges	Length	160 characters per notification text; 140 for a single message
Keep-alive	enquire_link every <i>n</i> seconds	Sender	SMSC From Number; optional prefix added to destinations; international prefix stripped
Direction	Mobile Terminate and Mobile Originate enabled per centre	Throughput control	Max Allowed Messages in flight; throttled on queue-full; retry interval doubling to 5 min
		Receipts	Delivery receipts matched by message ID, in memory and from the database

Inbound and reporting

MO replies	Sender matched to an account by number; digits stored as the recipient's vote
Report	Per recipient and number: submitted, delivered or failed, receipt status, vote
System events	One event per outage and per recovery; SMS Fail per abandoned message
Logs	Per-centre log of PDU headers with bodies redacted; level debug to fatal; viewer and download

Operations and licensing

Location	Account Portal > Platform Extensions > SMSC; System Administrator
Centres	Any number; each with its own daemon and log
Alternative	A hosted messaging gateway selectable as the active provider; an HTTP gateway URL template is also supported
Applications	Mass Notification SMS channel; conference moderator alerts
Licence	SMSC feature on the system licence

Sample use cases

Public safety

A county sends a shelter-in-place text to every registered number of every resident; the receipts show who received it and the replies — 1 for safe — fill the vote column of the report.

Enterprise conferencing

A quarterly call has thirty people on the bridge and no host; the host's phone buzzes with the dial-in number and moderator code.

Operators and service providers

A carrier binds the platform to its own SMS centre with its short code as sender, keeps a second centre for another market, and reads the SMPP log when the aggregator changes a numbering parameter.

One platform, connected to yours

SMS Centre is one of the platform extensions of the Universal Service Node — options that connect the platform to the infrastructure around it. Each is licensed on its own, so a system carries only what its deployment requires.

Call 972-590-0200

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