



Deployment Architecture Options

PSTN solutions



Jodo World

a digital cloud unified communication-enabled business management framework

- PSTN/GSM and Digital communication media enabled
- Cloud-based, browser-operated platform
- Designed for distributed architecture & multi-tenancy



Jodo PSTN Solutions – key points

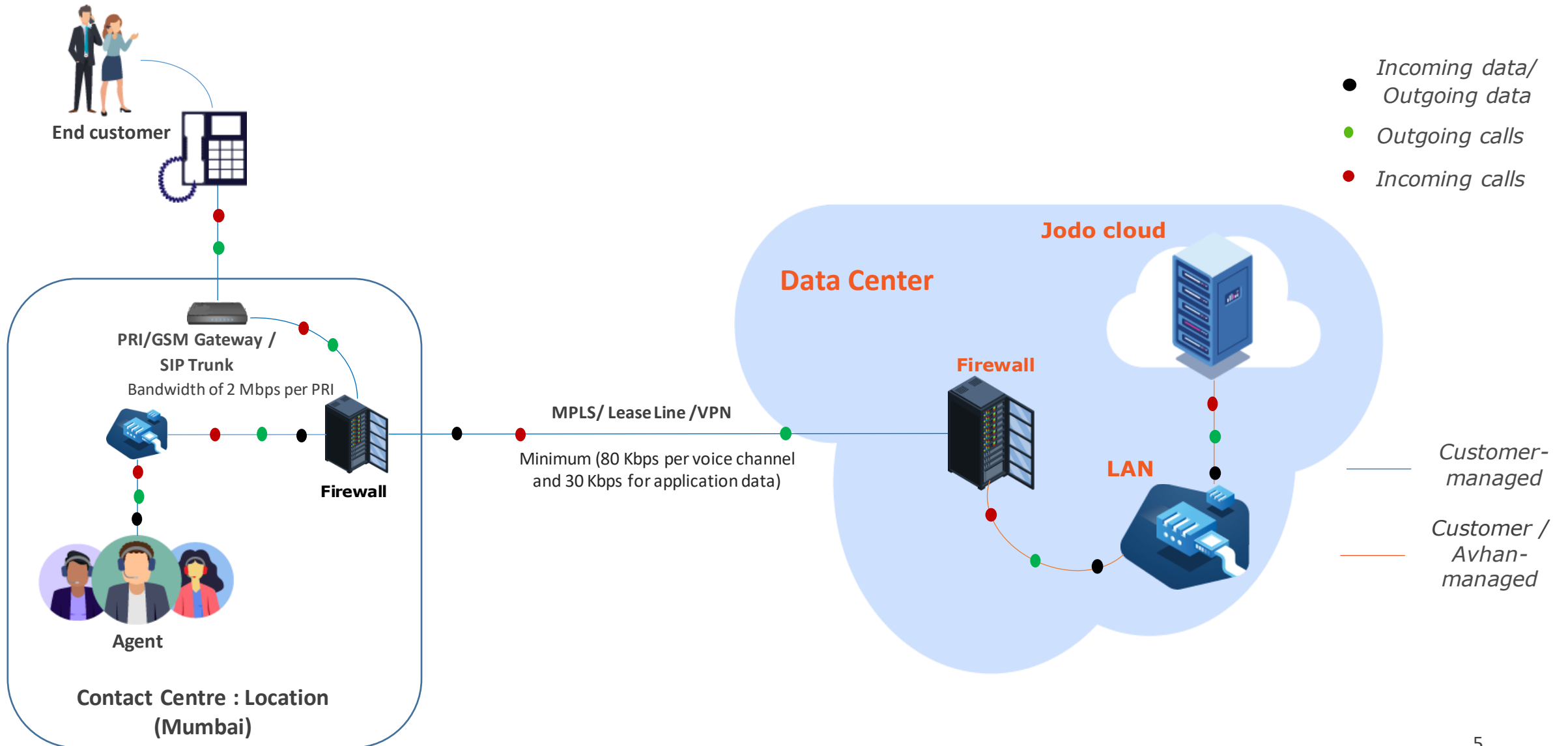
- A. PSTN calls (*call media traffic, incoming and outgoing calls*) of a customer are enabled by Jodo instance to be handled (**securely & 100% recording**) from distributed locations (**office-and-non-office**)
- B. Deployment architecture options for managing PSTN calls, alongwith related business & call data, (*applicable in different customer set-up \ requirement scenarios*), are in following slides -
 - 1. Office - please refer **option #s 1 – 4**),
 - 2. Non-office - By customer's employees from their **homes** on their home phones & over home internet - ADSL/ fiber (via VPN) (please refer deployment **option #s 5 – 6**)
- C. Jodo platform operates on **SIP trunk** for PSTN calls. (Customers with PRIs, please refer next slide for options available to convert PRIs to SIP trunk via gateways.)

Jodo PSTN solutions – PRI to SIP conversion

- A. Jodo handles PSTN voice media *(incoming & outgoing)* via SIP *(as SIP is best suited for distributed architecture and multi-tenancy)*.
- B. SIP channels are directly terminated and managed in Jodo platform *(installed in client's private cloud data center)*.
- C. If customer currently uses PRI lines, PRI traffic can be converted to SIP, options available for this are:
 - 1. Customer sets up PRI gateway in their premises (single or multiple locations) and defines SIP forwards to Jodo platform, or
 - 2. PRI and PRI gateway are installed in Client DataCenter, SIP output of gateway is directed to Jodo instance in data center, or
 - 3. PRI terminated in client EPABX, take SIP output from EPABX, and connect to Data Center and Jodo

Scenario 1

PRI terminated at Local Contact Center/Office and Jodo Cloud instance at Data Center



Scenario 1

PRI terminated at Local Contact Center/Office and Jodo Cloud Instance at Data Center

Category	Equipment	Location
Telecom type and Termination	PRI Gateway	Local Contact / Delivery center / Office
Jodo Cloud Applications	Jodo Virtualised Servers	Customer/3 rd party Data Center
Agents	Laptop / Desktop / Tablet	Local contact / Delivery center / Office
Connectivity for telecom data traffic (with PRI/GSM Gateway/SIP Trunk)	MPLS / Leased Line /VPN (per current DoT permissions during COVID-19 situation)	Link between Delivery center and Data center
Connectivity for Jodo applications data traffic (with Delivery center)	MPLS / Leased Line /VPN (per current DoT permissions during COVID-19 situation)	Link between Delivery center and Data center
Call recordings storage	Jodo Virtualised Servers	Customer/3 rd party data center

Call traffic on PRI is processed in a Customer / 3rd party Data center via an MPLS/leased line

Inbound call:

- Incoming call from Customer lands on PRI gateway at Contact center and is routed to Agent/User via Jodo Cloud Data center.

Outbound call:

- Agent/User at Contact center dials a number. The outgoing call is routed via Jodo Cloud Data centre and is connected to Customer via the PRI/GSM gateway.

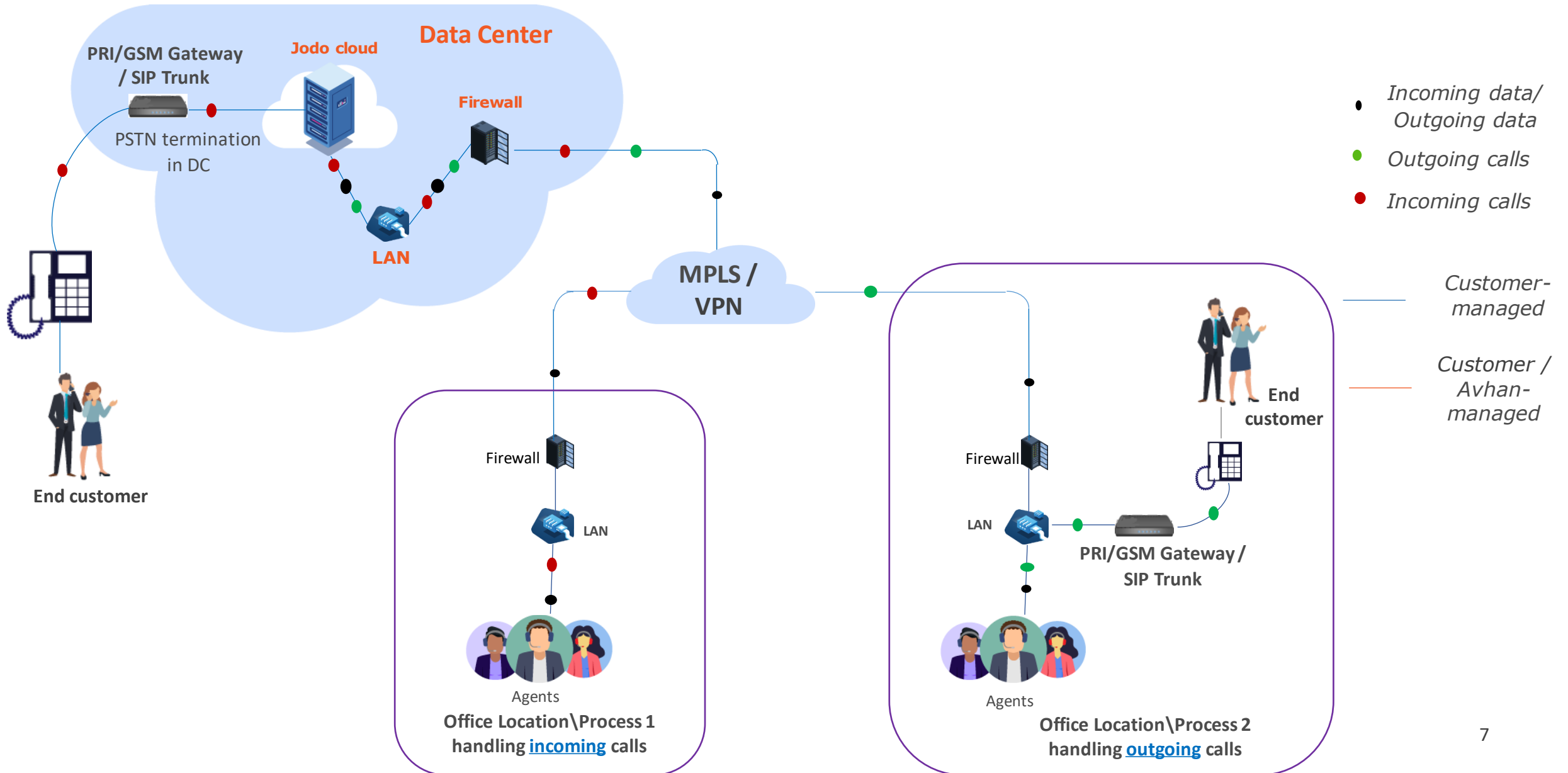
Connectivity Bandwidth requirement: (per agent)

Voice : 80 kbps

CRM and Call data: 30 kbps

Scenario 2

PRI/SIPs in Data Center, Agents in different office locations connected over MPLS/VPN over broadband



Scenario 2

PRI/SIPs in Data Center, Agents in different office locations connected over MPLS/VPN over broadband

Category	Equipment	Location
Telecom type and Termination	PRI/GSM Gateway/SIP Trunk	Local Contact/ Delivery center / Office / Data Center
Jodo Cloud Applications	Jodo Virtualized Servers	Customer/3 rd party Data Center
Agents	Laptop / Desktop / Tablet	Local Contact / Delivery center / Office
Connectivity for Telecom data traffic (with PRI/GSM Gateway/SIP Trunk)	MPLS / Leased Line /VPN (per current DoT permissions during COVID-19 situation)	Link between delivery Center and Data Center
Connectivity for Jodo applications data traffic (with Delivery center)	MPLS / Leased Line /VPN (per current DoT permissions during COVID-19 situation)	Link between delivery Center and Data Center
Call Recordings storage	Jodo Virtualised Servers	Customer/3 rd party Data Center

Bandwidth requirement: (per agent)
Voice : 80 kbps/session
CRM and Call Data: 30 kbps

Call traffic is processed on PRI in Customer / 3rd party data center via leased line

Inbound call:

Calls land on PRI/GSM Gateway/SIP Trunk at data center and call is routed to agent via Jodo Cloud through MPLS

Outbound call:

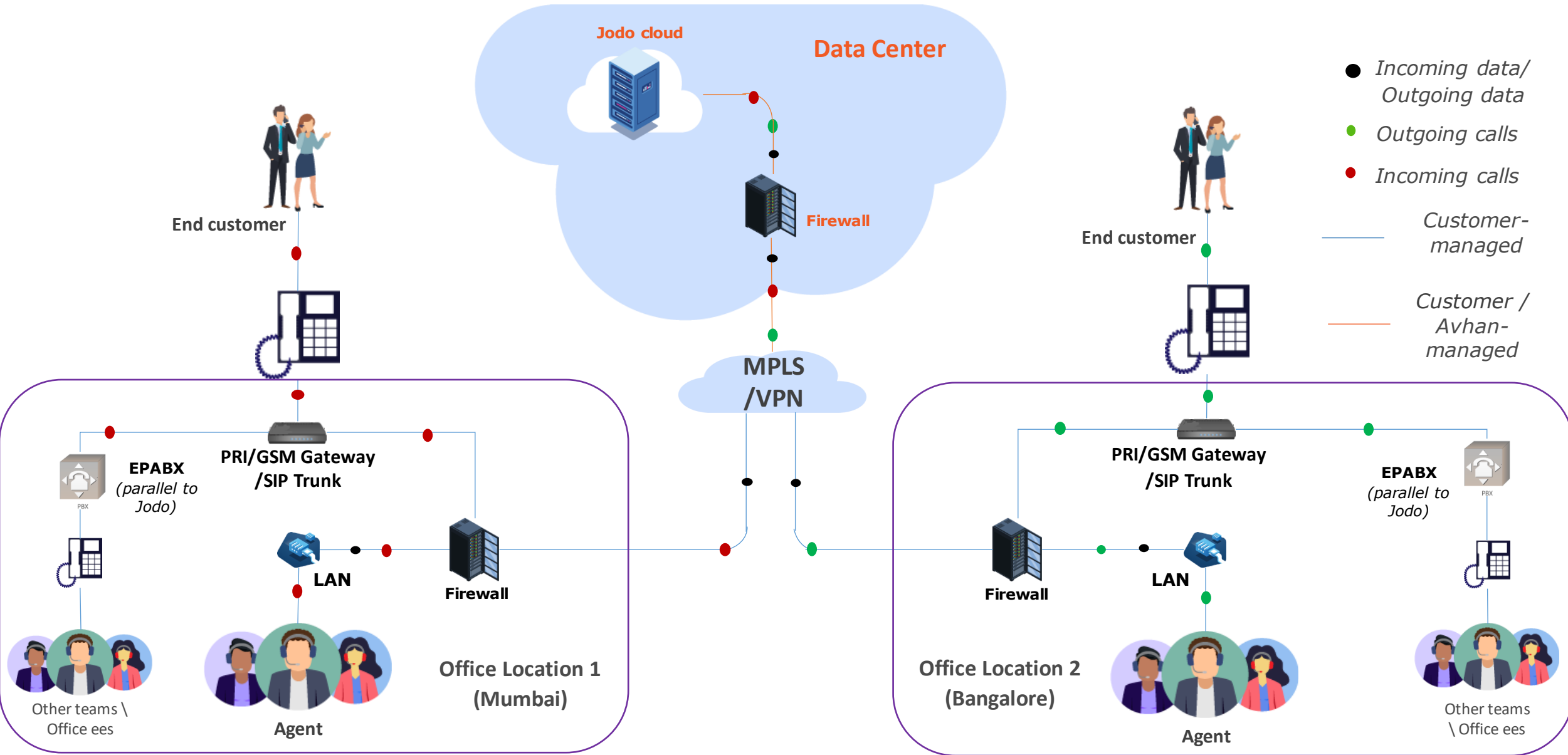
Outbound call initiated by an agent, is handled via Jodo Cloud placed at the data center and then dialed to the customer through the PRI/GSM Gateway/SIP Trunk deployed at the local contact center

For India - TRAI Regulations prohibits inter-circle outbound calling and PRI terminated at local CC

Scenario 3

PRI/SIPs to share telecom resources between Contact Centers with multiple business processes, working from multiple offices

- Incoming data/
Outgoing data
- Outgoing calls
- Incoming calls
- Customer-
managed
- Customer /
Avhan-
managed



Scenario 3

PRI/SIPs to share telecom resources between Contact Centers & other business processes working from multiple offices

Category	Equipment	Location
Telecom type and Termination	PRI/GSM Gateway/SIP Trunk	Local Contact Center / Delivery center / Office
Jodo Cloud Applications	Jodo Virtualized Servers	Customer/3 rd party Data Center
Agents	Laptop / Desktop / Tablet	Local Contact/ Delivery center / backend Office
Connectivity for Telecom data traffic (with PRI/GSM Gateway/SIP Trunk)	MPLS / Leased Line/VPN (per current DoT permissions during COVID-19 situation)	Link between delivery Center and Data Center
Connectivity for Jodo applications data traffic (with Delivery center)	MPLS / Leased Line /VPN (per current DoT permissions during COVID-19 situation)	Link between delivery Center and Data Center
Call Recordings storage	Jodo Virtualized Servers	Customer/3 rd party Data Center

Bandwidth requirement: (per agent)
Voice : 80 kbps/session
CRM and Call Data: 30 kbps

Inbound call:

Customer calls on the toll free number, call lands on PRI/GSM Gateway / SIP Trunk placed at contact center and is routed to agent via Jodo Cloud

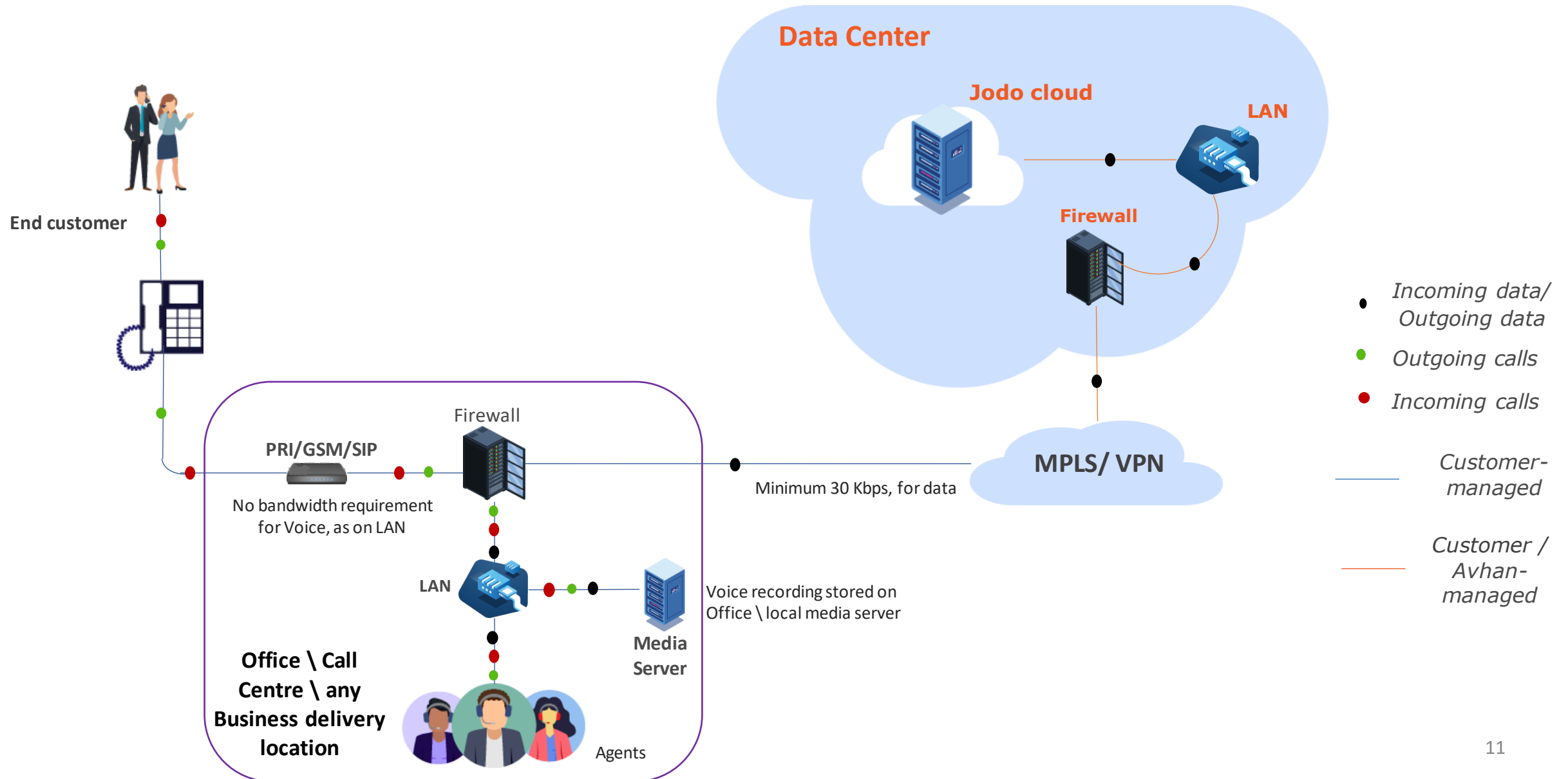
Outbound call:

Agent dials a number, call request is sent via Jodo Cloud and connected via PRI/GSM gateway/SIP Trunk to customer

For India - TRAI Regulations prohibits inter-circle outbound calling and PRI terminated at local CC

Scenario 4

PRI/SIP Trunk + Jodo Media Server at Office/Call Centre location and data on Jodo cloud



Scenario 4

PRI/SIP Trunk + Media Server at Office/Call Centre location and data on Jodo cloud

Category	Equipment	Location
Telecom type and Termination	PRI/GSM Gateway /SIP Trunk	Local Contact Center/ Delivery center/ Office
Jodo Cloud Applications	Jodo Virtualized Servers	Customer/3 rd party Data Center
Voice processing locally (connected to PRI/GSM Gateway /SIP Trunk)	Local Media Server/ Telephony server	Contact center
Agents	Laptop / Desktop / Tablet	Local Contact/ Delivery center / Office
Connectivity for Telecom data traffic (with PRI/GSM Gateway/SIP trunk)	MPLS / Leased Line /VPN (per current DoT permissions during COVID-19 situation)	Link between delivery Center and Data Center
Connectivity for Jodo applications data traffic (with Delivery center)	MPLS / Leased Line/ VPN (per current DoT permissions during COVID-19 situation)	Link between delivery Center and Data Center
Call Recordings storage	Virtualized/Physical Servers	On-premise Customer/ Delivery Centre

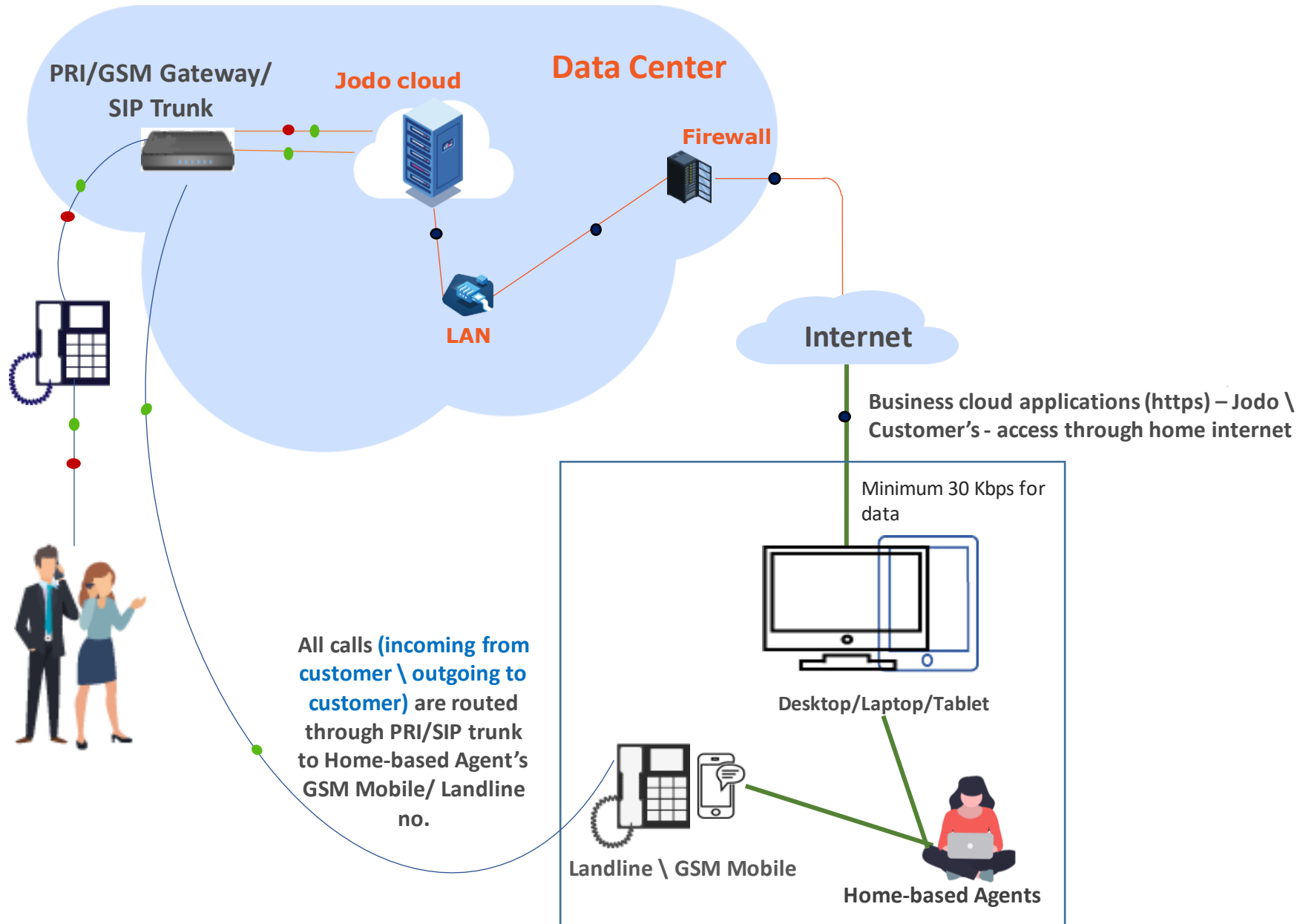
Deploying the media/telephony server locally, bandwidth utilization is reduced as voice files are processed locally by Media Server, and only application data is sent through Jodo Cloud via MPLS / Leased line / VPN (per current DoT permissions during COVID-19 situation)

Voice files and recordings are stored in Media server locally

Bandwidth requirement: (per agent)
CRM and Call Data: 30 kbps

Scenario 5

PRI/SIP Trunk at Data Center with call routed to Home-based agents on Landline/Mobile phones with data on Desktop/Laptop/Tablet



- Incoming data/ Outgoing data
- Outgoing calls
- Incoming calls

- Customer-managed
- Customer / Avhan-managed
- Agent-Managed

Servers/Gateway can be provided & managed by Avhan/Customer

Telecom terminations to be provided by client

Scenario 5

PRI/SIP Trunk at Data Center with call routed to Home-based agents on Landline/Mobile phones with data on Desktop/Laptop/Tablet

Category	Equipment	Location
Telecom type and Termination	PRI/GSM Gateway /SIP Trunk	Delivery center/ Office
Jodo Cloud Applications	Jodo Virtualized Servers	Customer/3 rd party Data Center
Customer's Business cloud applications	Virtualized Servers	Customer/3 rd party Data Center
Voice processing on central server (connected to PRI/GSM Gateway /SIP Trunk)	Media Server/ Telephony server within Jodo Cloud	Customer/3 rd party Data Center
Home-based agents	1. Data - Laptop / Desktop / Tablet 2. Voice call - Mobile/Landline Phone	Delivery center / Office /Home Agents
Connectivity for Jodo applications data traffic (with Delivery center)	Internet	Delivery center / Office /Home Agents
Call Recordings storage	Jodo Virtualized Servers	Customer/ 3 rd party Data Center

Inbound call:

Customer calls on the toll free number, call lands on PRI/GSM Gateway / SIP Trunk placed at data center and is routed to agent via Jodo Cloud on his Mobile/Landline phone

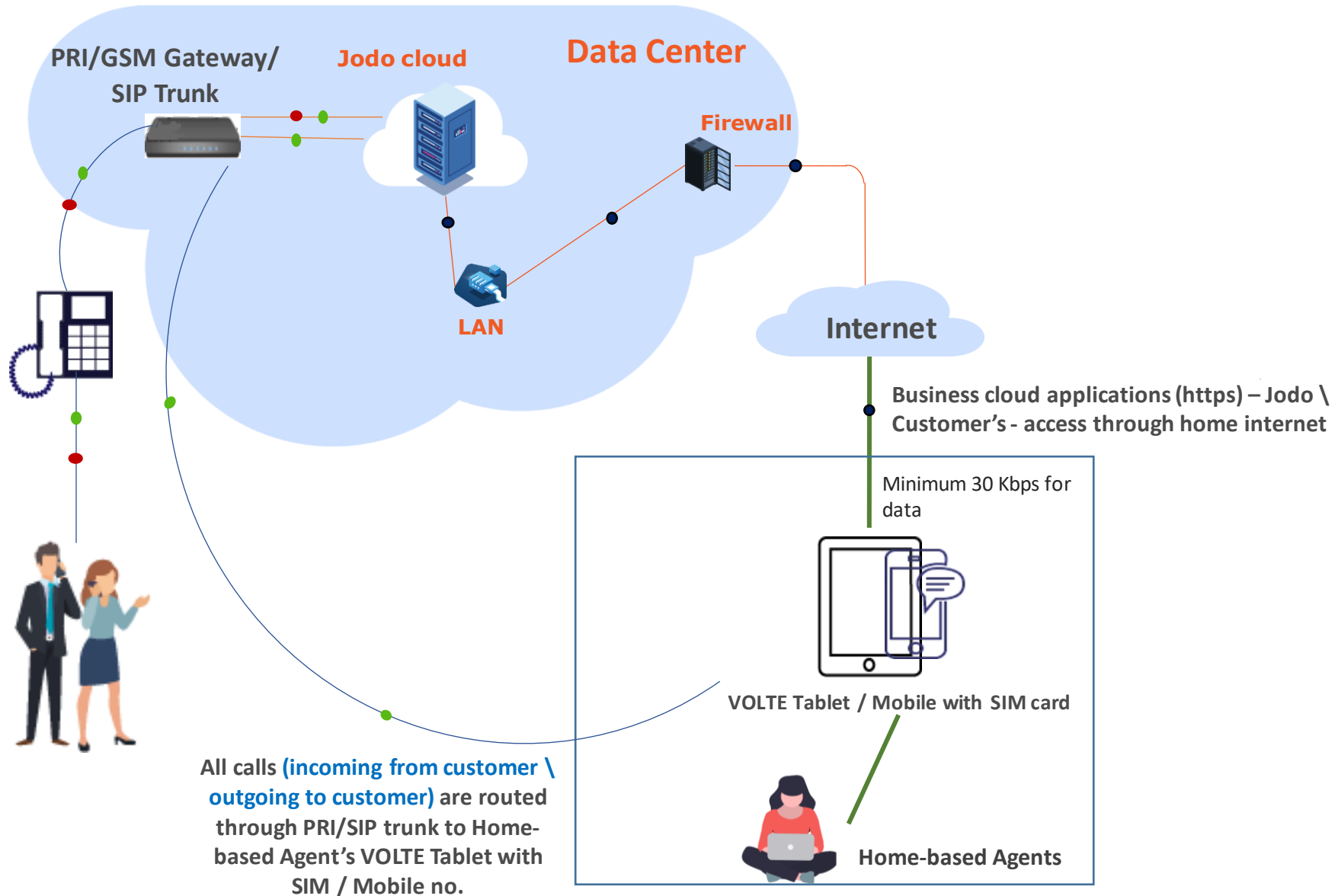
Outbound call:

Agent enters the number to be dialed, call request is sent via Jodo Cloud and connected via PRI/GSM Gateway /SIP Trunk to customer and transferred on Agents Mobile or Landline

Bandwidth requirement: (per agent)
CRM and Call Data: 30 kbps

Scenario 6

PRI/SIP Trunk at Data Center with call & data routed to Home-based agents on VOLTE Tablet/Mobile with SIM card



- Incoming data/ Outgoing data
- Outgoing calls
- Incoming calls

- Customer-managed
- Customer / Avhan-managed
- Agent-Managed

Servers/ Gateway can be provided & managed by Avhan/Customer

Telecom terminations to be provided by client

Scenario 6

PRI/SIP Trunk at Data Center with call & data routed to Home-based agents on VOLTE Tablet/Mobile with SIM card

Category	Equipment	Location
Telecom type and Termination	PRI/GSM Gateway /SIP Trunk	Delivery center/Office
Jodo cloud applications	Jodo Virtualized Servers	Customer/3 rd party Data Center
Customer's Business cloud applications	Virtualized Servers	Customer/3 rd party Data Center
Voice processing on central server (connected to PRI/GSM Gateway/SIP Trunk)	Media Server/ Telephony server within Jodo Cloud	Customer/3 rd party Data Center
Home-based agents	VOLTE Tablet/Mobile with SIM card	Delivery center / Office /Home Agents
Connectivity for Jodo applications data traffic (with Delivery center)	Internet	Delivery center / Office /Home Agents
Call Recordings storage	Jodo Virtualized Servers	Customer/3 rd party Data Center

Inbound call:

Customer calls on the toll free number, call lands on PRI/GSM Gateway/SIP Trunk placed at data center and is routed to agent via Jodo Cloud on his Mobile/Landline phone

Outbound call:

Agent enters the number to be dialed, call request is sent via Jodo Cloud and connected via PRI/GSM Gateway/SIP Trunk to customer and transferred on Agents Mobile or Landline

Bandwidth requirement: (per agent)
CRM and Call Data: 30 kbps

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anywhere.
in any language.**



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Communication
channels to
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