



RURAL PERSPECTIVES

Let's Innovate Now

Robocall Mitigation Using Call Trust

For IP and TDM Networks

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Comments Heard Around the Country

“I don’t want to answer calls from anyone I don’t know”

“Most calls today are spam, so I ignore them”

“I wish my service provider would stop these annoying calls”

“Jamie, I just got a phone call from myself!”

What if we could tell our customers a call was bad?
Or, even better, prevent them from receiving it?



AGENDA

The Robocalling Problem

- Robocall Mitigation Using Call Trust

Proposed STIR / SHAKEN Solutions for TDM

Ribbon Call Trust

Summary

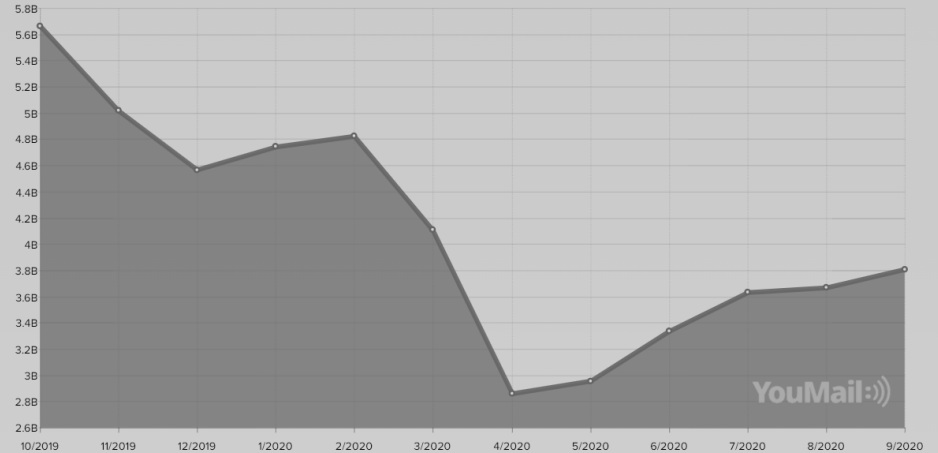
Scope of the Robocall Problem

- **47 billion** robocalls in 2018
- **57 billion** robocalls in 2019



September 2020 Nationwide Robocall Data

CALLS PLACED	PER DAY	PER HOUR	PER SECOND	AVG. CALLS PER PERSON
3.8B	126.9M	5.3M	1.5K	11.6



After Covid-19 drop, robocalls are on the rise

Calling Events

Beneficial



Malicious

Robocalls



- Emergency/Public Service
- Informational Updates
- Healthcare

- Charities
- Political Campaigns
- Telemarketers

- Frauds and scams

Individual Calls



- Personal/Trusted Entity

- Debt collectors

What defines a Nuisance Call is specific to each individual

FCC Report and Order 20-136



- Grants **two-year extension** for small operators (< 100,000 lines) to implement STIR/SHAKEN
- **Does not mandate STIR/SHAKEN for TDM networks**, but expects industry to solve the problem
- Requires “**an appropriate robocall mitigation program** to prevent unlawful robocalls from originating on the network of the provider.”

Rural Service Providers do not have a “Get out of Jail Free” card.



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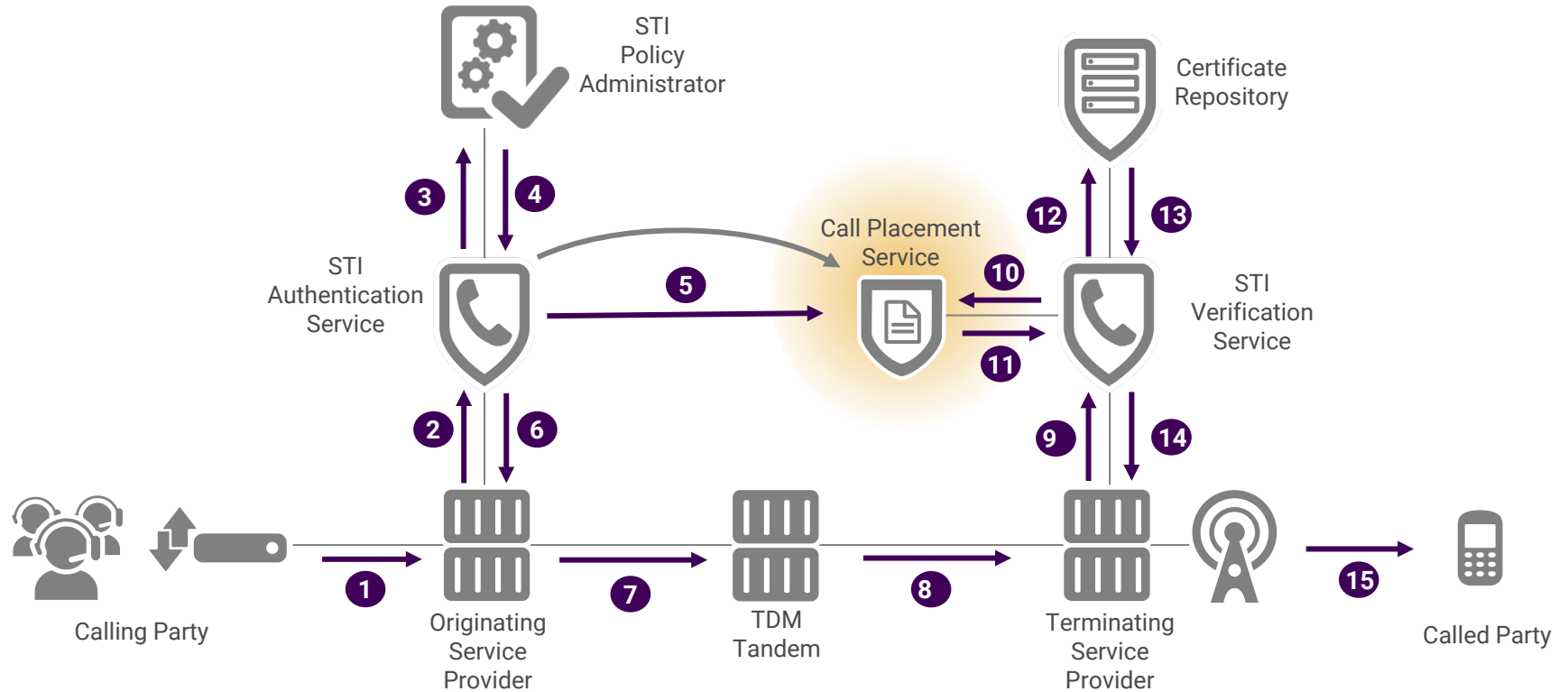
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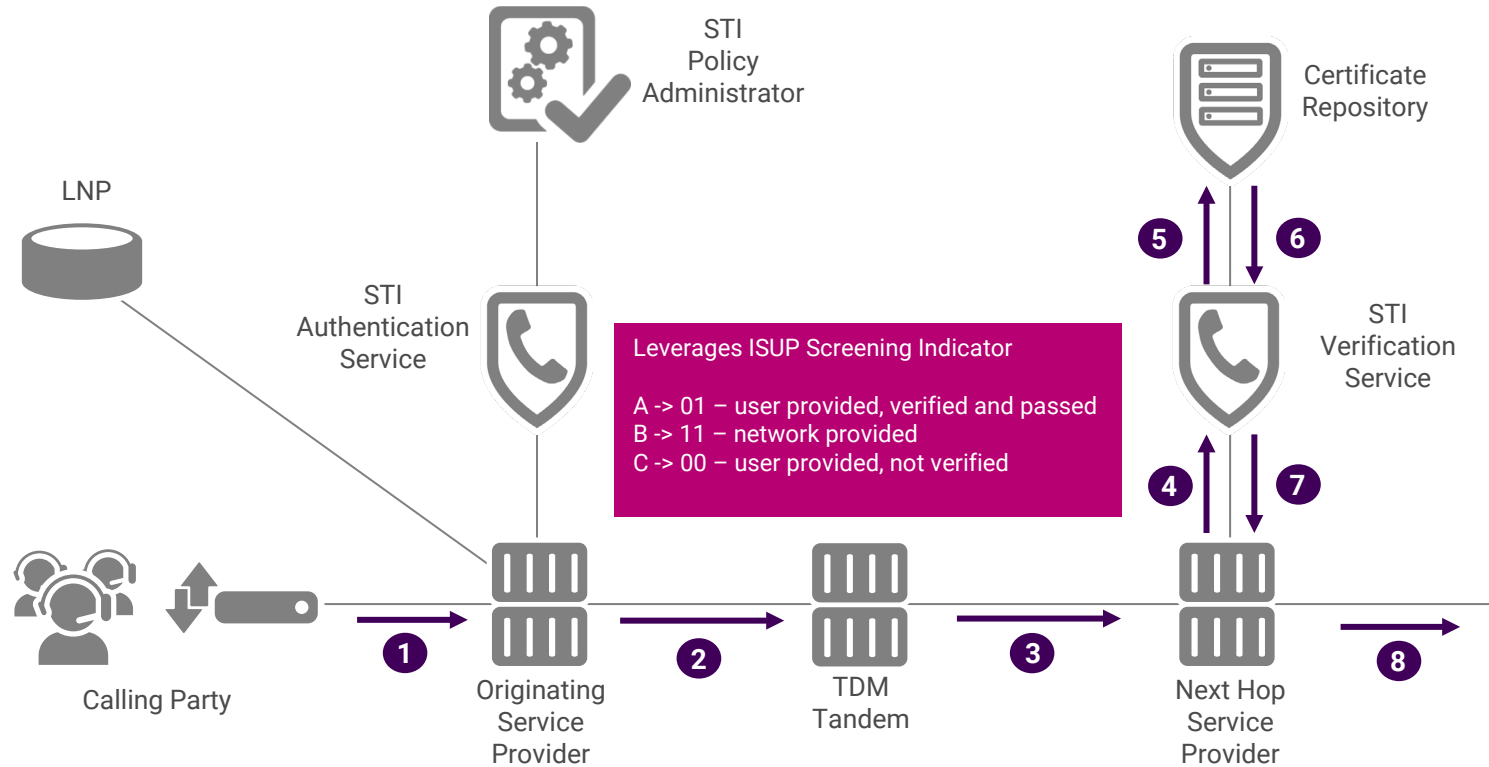
Draft STIR / SHAKEN Out-of-Band Proposal

ATIS Reference: NONIPCA-2020-00034



Ribbon Proposed Alternative for TDM

ATIS Reference: NONIPCA-2020-00008



Out of Band vs. ISUP Screening for TDM

OOB

- Requires Tier 1 operators to upgrade existing STIR/SHAKEN infrastructure
- Requires TDM <-> STI gateway (IWF) (\$)
- Requires Terminating Service Provider to query STI-VS for every call (\$)

ISUP Screening

- Simple call flow
- Only connected carriers involved
- Requires TDM elements to support ISUP Screening mapping

Both solutions being discussed in ATIS
Ribbon portfolio will support selected standard



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Where does STIR/SHAKEN Come Up Short?

Intent and Reputation

A calling number is “vouched for” as owned by the service provider but the user behind the number is not verified



Three Key Inputs for Identity Assurance

Identity

Who is the
originator?

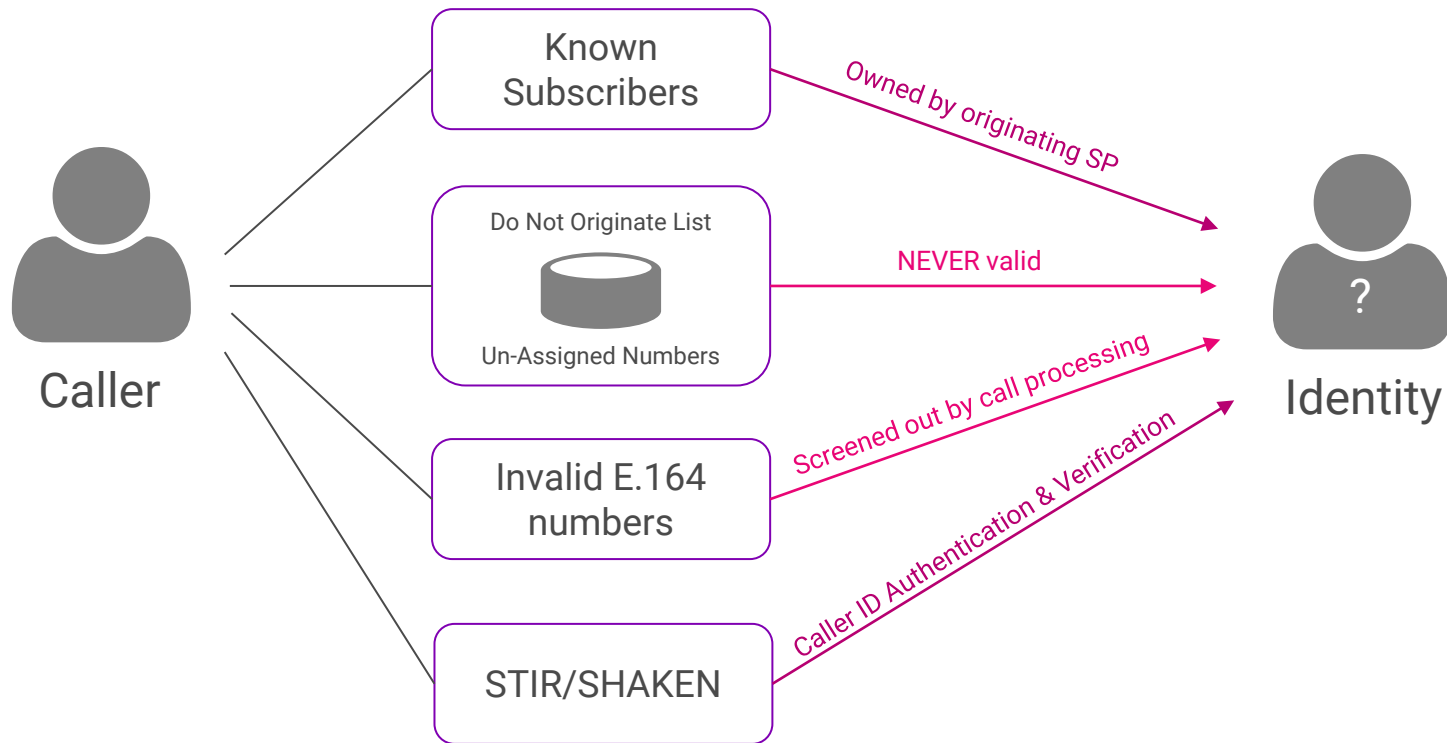
Reputation

Is this
someone I
want to talk to?

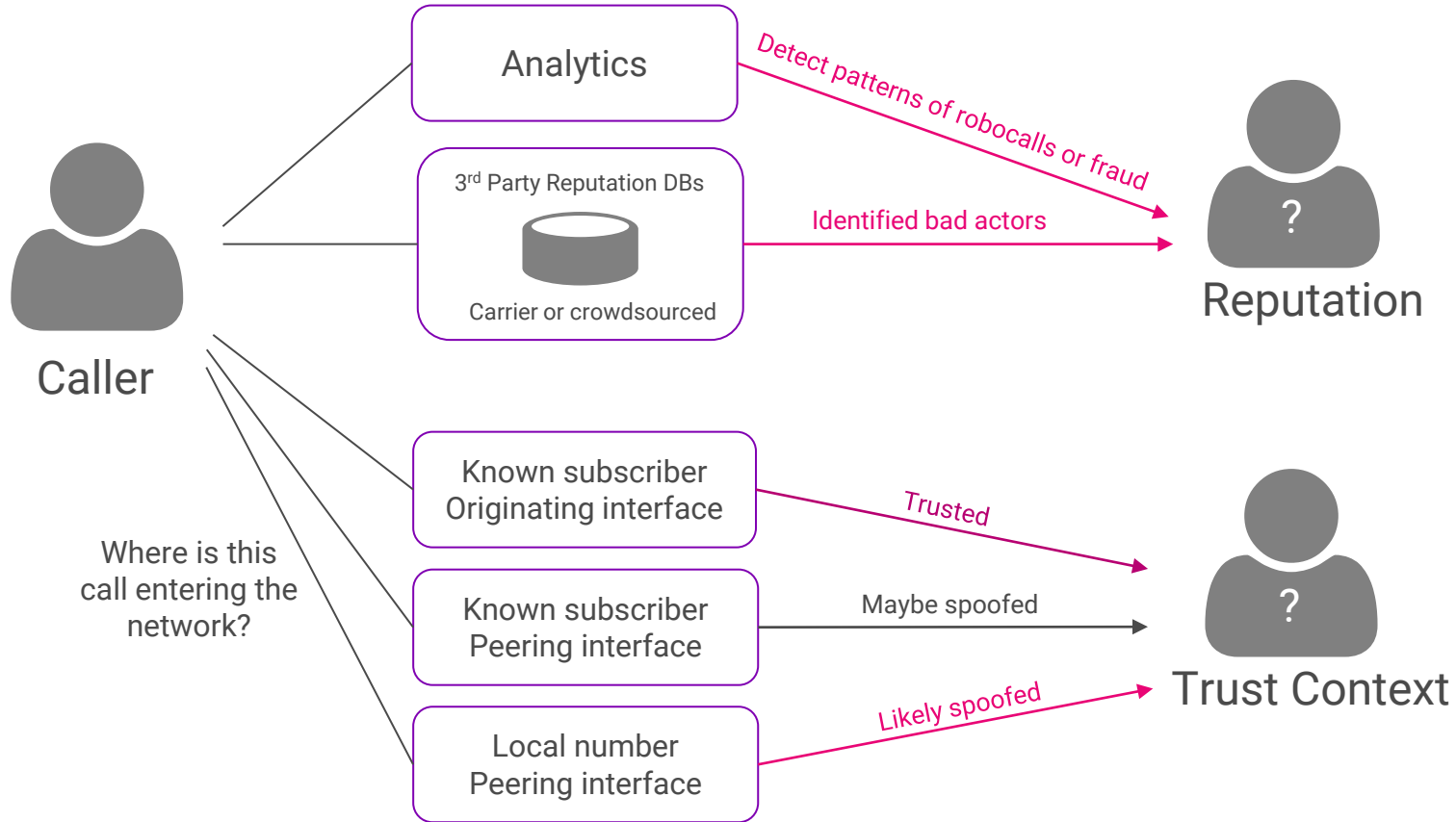
**Trust
Context**

Where did the
call originate?

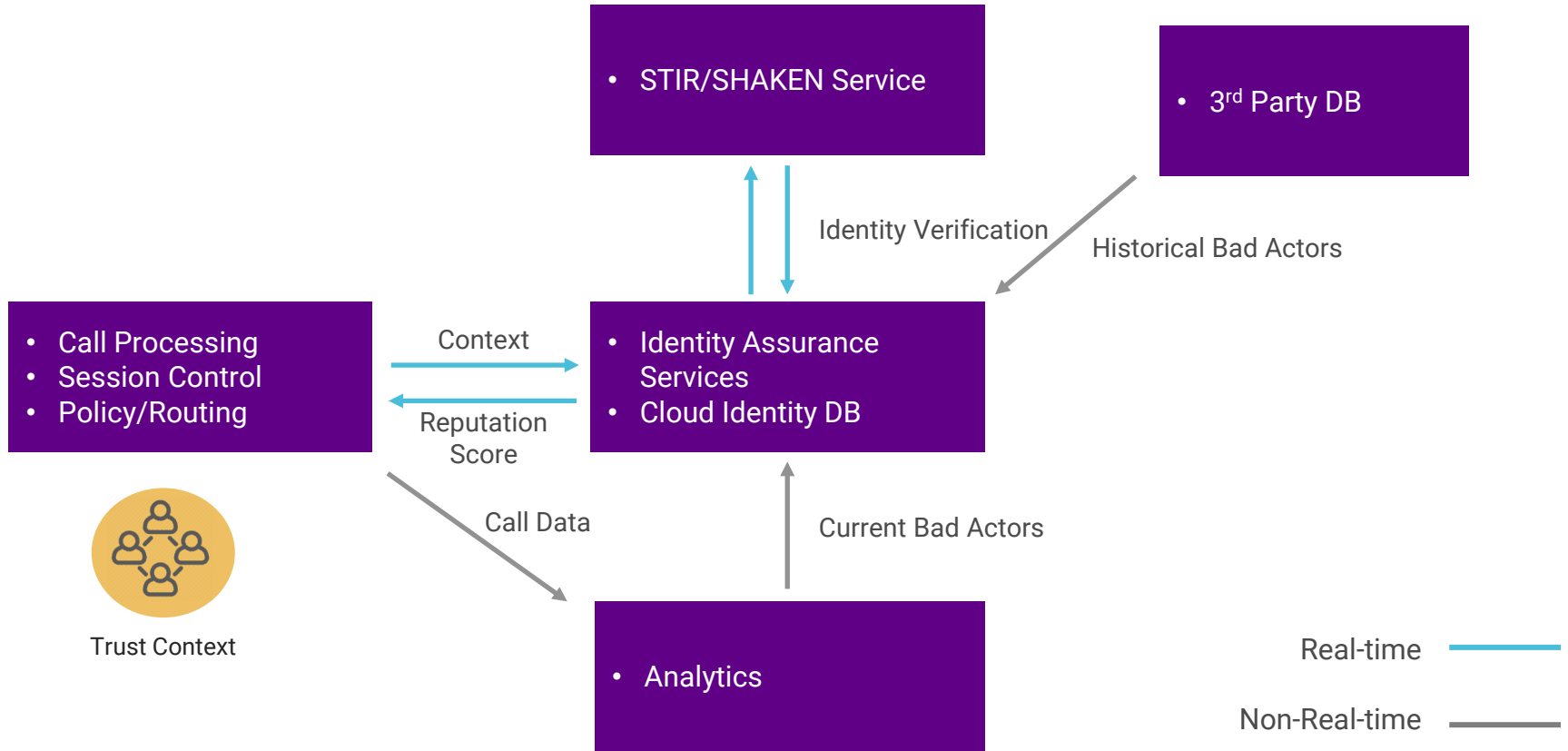
Determining Identity



Determining Reputation and Trust Context

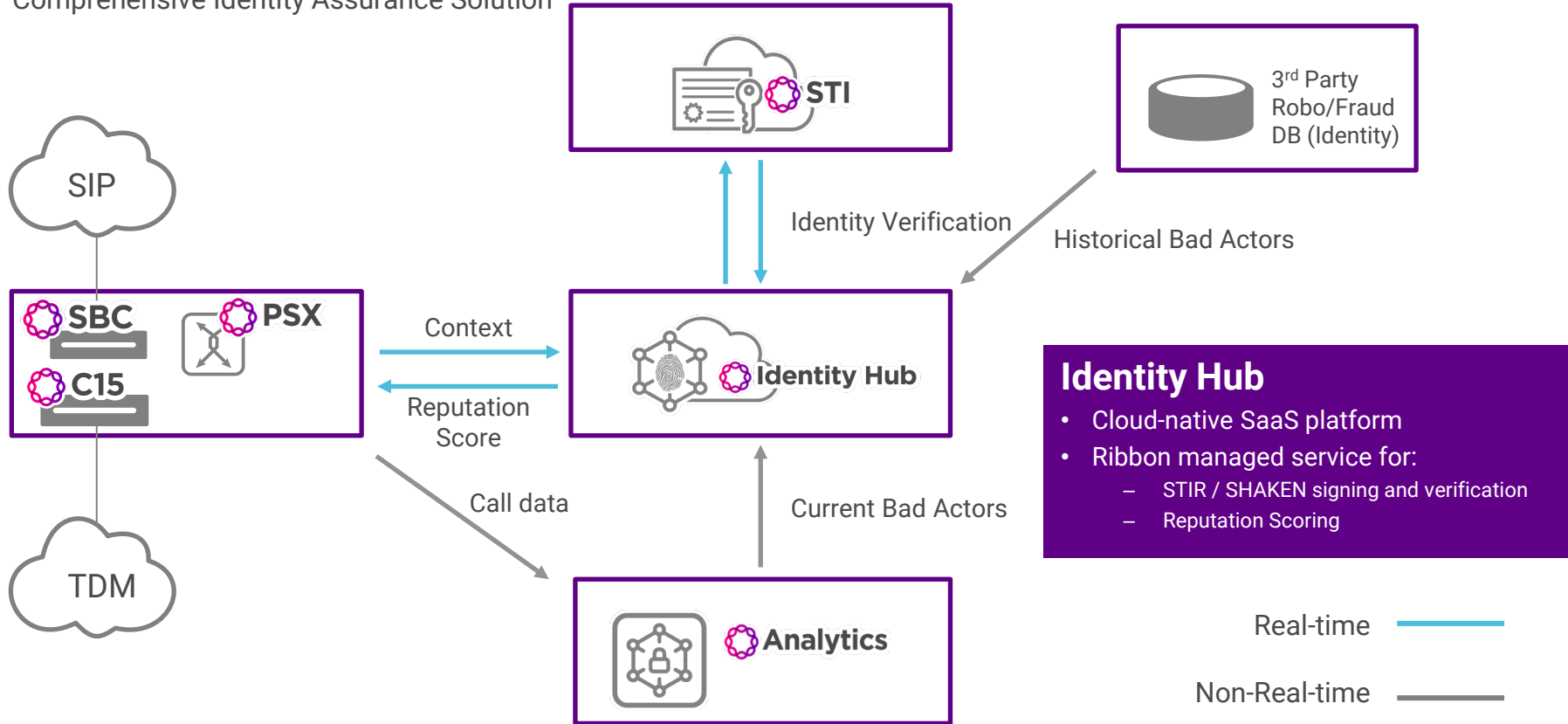


Putting it all Together



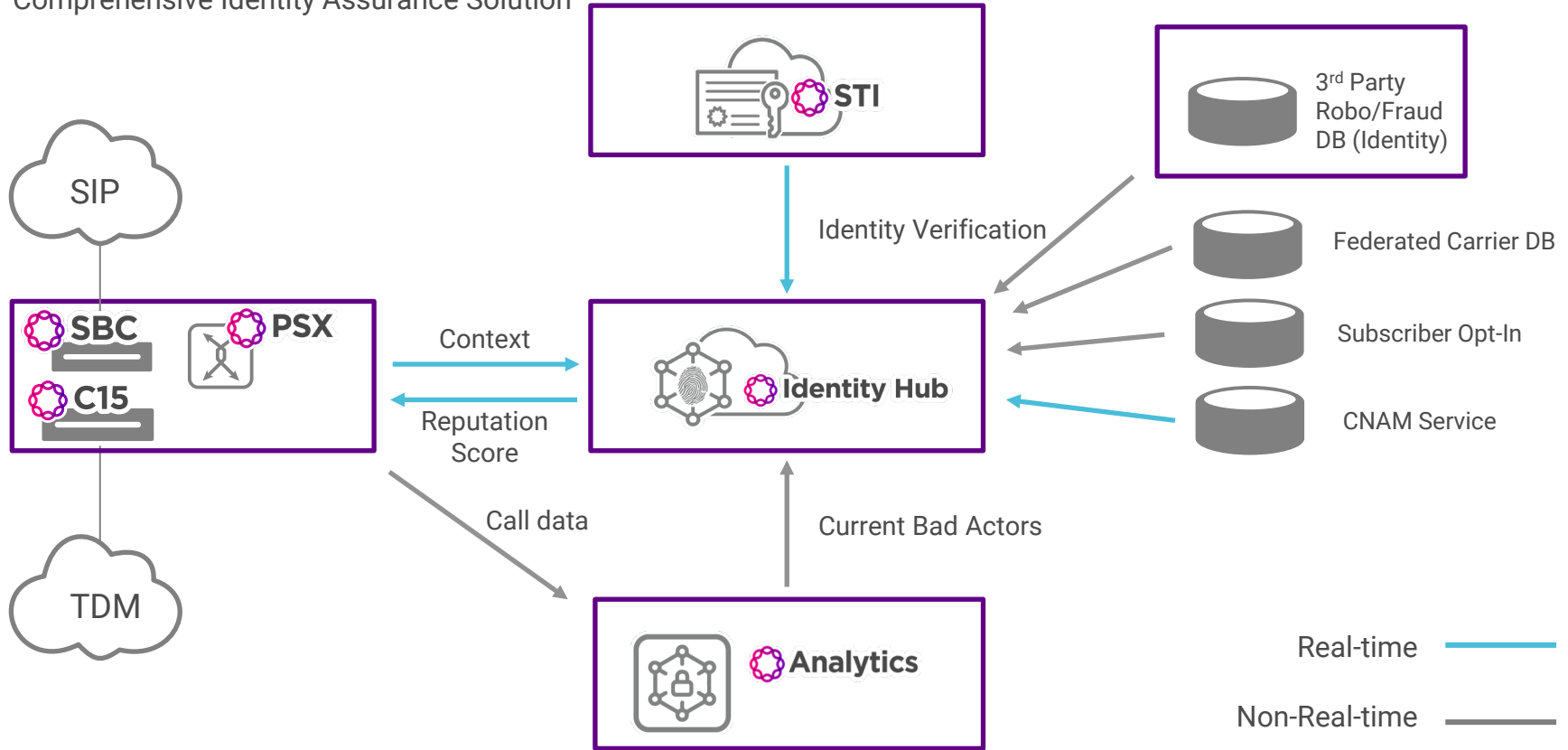
Ribbon Call Trust

Comprehensive Identity Assurance Solution



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Comprehensive Identity Assurance Solution





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- There is a two-year extension for Rural Service Providers, but they must address Robocalling
- There are no standards yet for TDM STIR / SHAKEN, so buyer beware
- Ribbon Call Trust addresses robocalling and fraud for both TDM and SIP networks
- Please join the Breakout Session at the end of this Webinar
 - Demo of Call Trust with C15 for TDM calls
 - PLM for the solution will join for discussion and Q&A

Thank You



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