

# LPWAN WG

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# Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

[BCP 9](#) (Internet Standards Process)

[BCP 25](#) (Working Group processes)

[BCP 25](#) (Anti-Harassment Procedures)

[BCP 54](#) (Code of Conduct)

[BCP 78](#) (Copyright)

[BCP 79](#) (Patents, Participation)

<https://www.ietf.org/privacy-policy/> (Privacy Policy)



## Reminder:

Minutes are taken \*

This meeting might be recorded \*\*

Presence is logged \*\*\*

\* Please contribute to the minutes at: <https://codimd.ietf.org/notes-ietf-interim-2021-lpwan-04-lpwan>

\*\* Recordings and Minutes are public and may be subject to discovery in the event of litigation.

\*\*\* From the Webex login

# Agenda bashing

[16:00] Administrivia	[10min]
o Note-Well, Scribes, Agenda Bashing	
o WG Status, IETF 110 Agenda	
[16:10] SCHC Architecture	[15min]
[16:25] Data Model for SCHC	[20min]
[16:45] AOB	[ QS ]

# WG Status

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May  
2020

*Perform SCHC Maintenance, including enabling SCHC mechanisms for Upper layer Protocols*

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Dec  
2020

*Produce Standard Track documents to apply SCHC IPv6/UDP over the baseline technologies*

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Feb  
2021

*Produce a Standards Track document to define the generic data models to formalize the compression and fragmentation contexts for LPWANs*

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Jul  
2021

*Produce a Standards Track document to enable operations, administration and maintenance (OAM) to the LPWAN device, including support for delayed or proxied liveness verification (Ping)*

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Oct  
2021

SCHC o SigFox Awaiting accept

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Feb  
2022

SCHC o NB-IoT Awaiting accept

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# Document advancement



Active Internet-Drafts (5 hits)				
<a href="#">draft-ietf-lpwan-coap-static-context-hc-18</a> LPWAN Static Context Header Compression (SCHC) for CoAP	2021-01-21 34 pages	IESG Evaluation::AD Followup <b>for 215 days</b> Submitted to IESG for Publication: Proposed Standard Reviews: genart, iotdir, opsd, secdir, tsvar		<a href="#">Éric Vyncke</a> <a href="#">Pascal Thubert</a>
<a href="#">draft-ietf-lpwan-schc-over-lorawan-14</a> Static Context Header Compression (SCHC) over LoRaWAN	2021-01-25 28 pages	RFC Ed Queue : <b>EDIT</b> for 22 days Submitted to IESG for Publication: Proposed Standard Reviews: genart, iotdir, opsd, tsvar	<b>1</b>	<a href="#">Éric Vyncke</a> <a href="#">Dominique Barthel</a>
<a href="#">draft-ietf-lpwan-schc-over-nbiot-04</a> SCHC over NB-IoT	2021-01-19 22 pages	I-D Exists WG Document <i>Feb 2022</i>		<a href="#">Éric Vyncke</a>
<a href="#">draft-ietf-lpwan-schc-over-sigfox-04</a> SCHC over Sigfox LPWAN	2020-11-02 14 pages	I-D Exists WG Document <i>Oct 2021</i>		<a href="#">Éric Vyncke</a>
<a href="#">draft-ietf-lpwan-schc-yang-data-model-04</a> Data Model for Static Context Header Compression (SCHC)	2021-02-02 42 pages	I-D Exists WG Document Reviews: yangdoctors		<a href="#">Éric Vyncke</a>
RFCs (2 hits)				
<a href="#">RFC 8376 (was draft-ietf-lpwan-overview)</a> Low-Power Wide Area Network (LPWAN) Overview	2018-05 43 pages	Informational RFC		<a href="#">Suresh Krishnan</a> <a href="#">Alexander Pelov</a>
<a href="#">RFC 8724 (was draft-ietf-lpwan-ipv6-static-context-hc)</a> SCHC: Generic Framework for Static Context Header Compression and Fragmentation	2020-04 71 pages	Proposed Standard RFC		<a href="#">Suresh Krishnan</a> <a href="#">Pascal Thubert</a>
Document	Date	Status	IPR	AD / Shepherd
Related Internet-Drafts (2 hits)				
<a href="#">draft-barthel-lpwan-oam-schc-02</a> OAM for LPWAN using Static Context Header Compression (SCHC)	2020-11-02 14 pages	I-D Exists		
<a href="#">draft-pelov-lpwan-architecture-00</a> Static Context Header Compression (SCHC) Architecture	2021-01-19 6 pages	I-D Exists		

# Action items

- Change the NBIOT target date to early 2022 => Done
- Find 3GPP assistance for Ana on NBIOT (Eric + Pascal) on hold => Edgar is back
- Laurent to refresh the model draft and the chairs to ask to an early review by YANG Doctors via datatracker => done
- Laurent to send a doodle on the ML to choose a time for a session on YANG -> doodle created  
[https://doodle.com/poll/tz69qbv2eqnmyam?utm\\_source=poll&utm\\_medium=link](https://doodle.com/poll/tz69qbv2eqnmyam?utm_source=poll&utm_medium=link)

# IETF 110

- Call for agenda items
- We have one hour
  - 15:30-16:30 CET / Wednesday 10<sup>th</sup>, Session II
- Usual suspects
  - Architecture, OAM, Data Model ?



# draft-pelov-lpwan-architecture

Alexnader Pelov

Pascal Thubert

Ana Minaburo

**Interim, February 18<sup>th</sup> 2021**

# Table of Contents

1. Introduction . . . . .	2
2. Definitions . . . . .	3
3. Global architecture . . . . .	3
• Define device / NGW vs. Peer routers (for PPPoE)	
• References RFC 8376 and discusses constraints	
• References RFC 8724 Positions SCHC C/D endpoints (layers)	
4. Data management . . . . .	4
• Introduces Yang data model	
• Discusses rule creation and update	
• Discusses rule installation and discovery	

- Thanks, Olivier, for the comments!

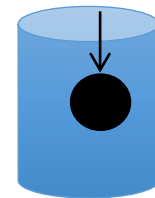
# SCHC Architecture

Device  
Application



End-Device

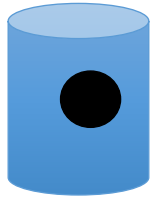
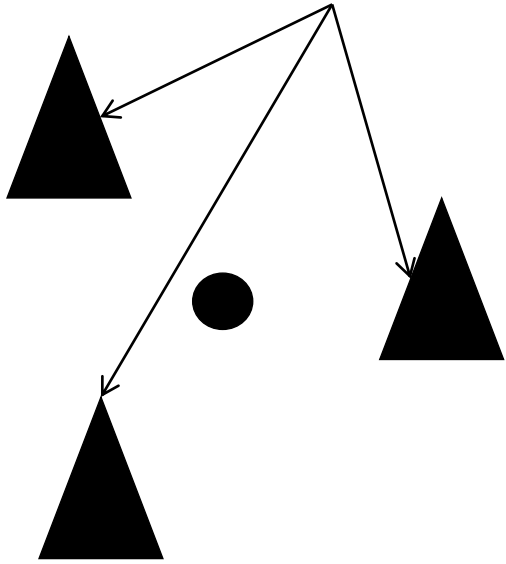
Network  
Application



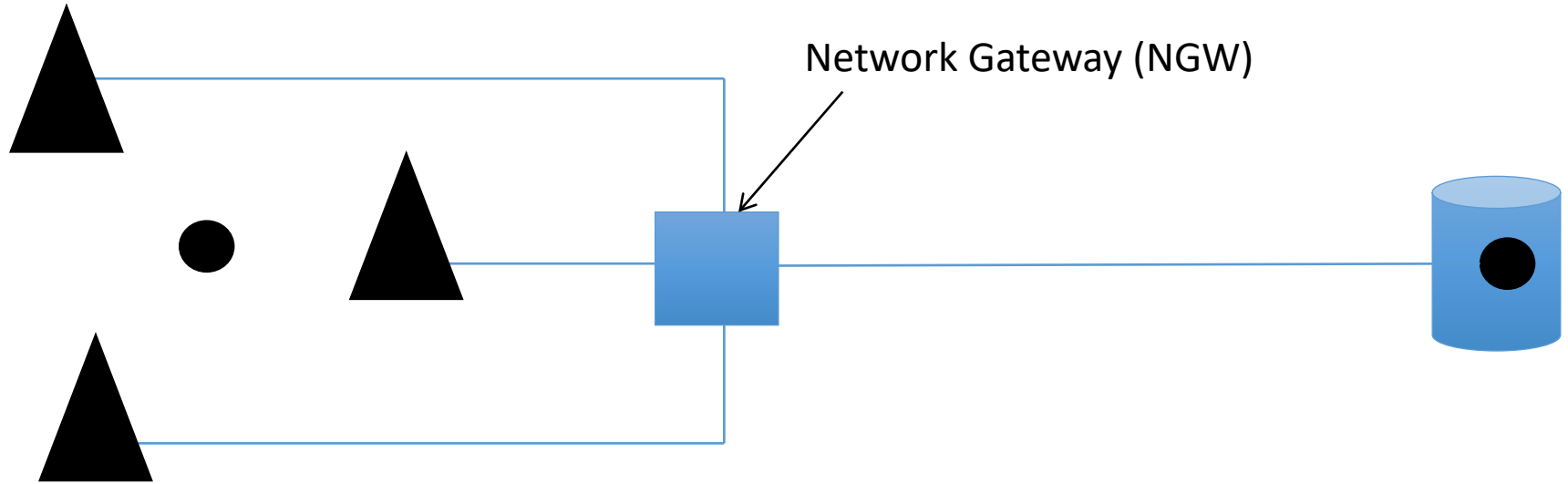
Application  
Server

# SCHC Architecture

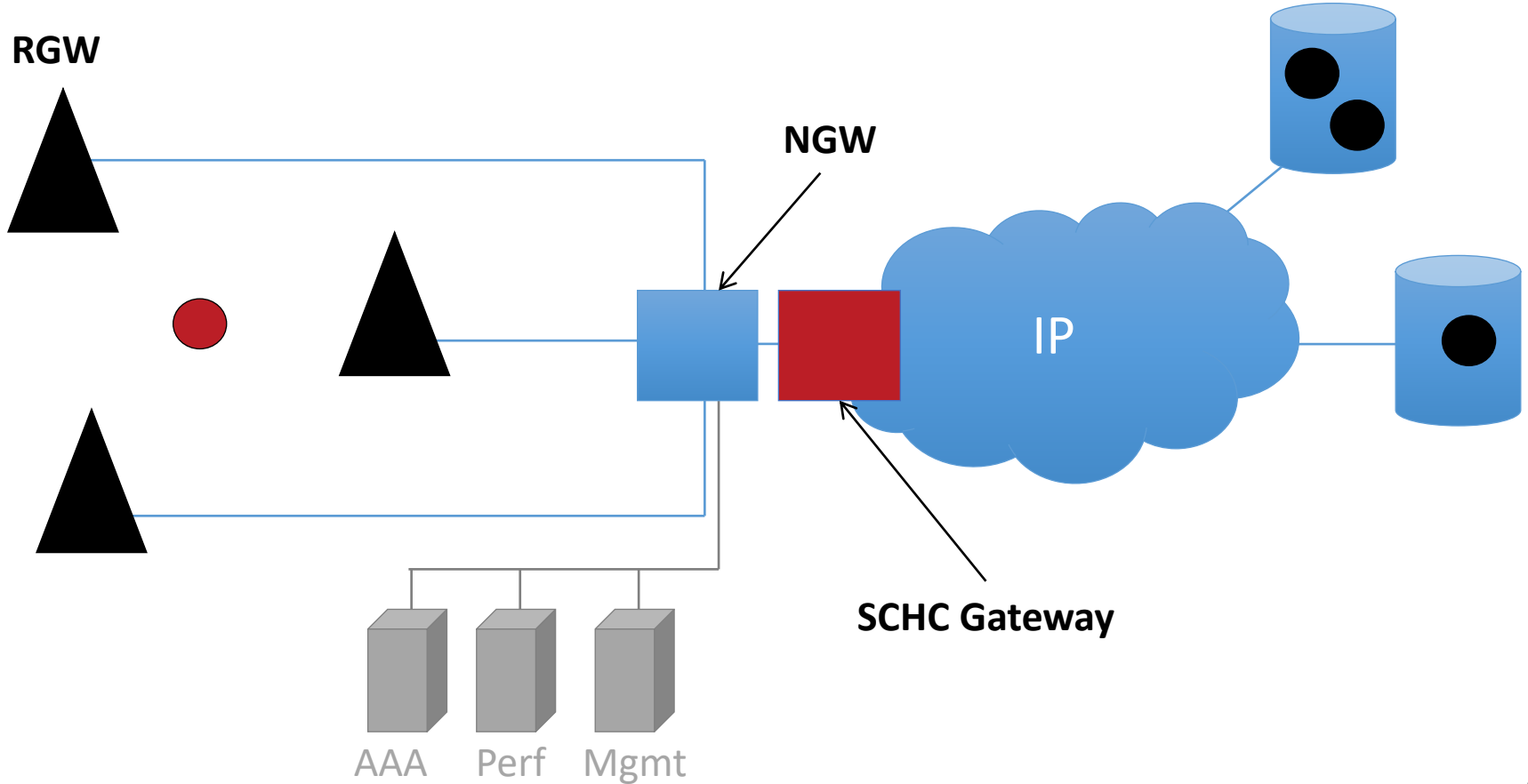
Radio Gateways (RGW)



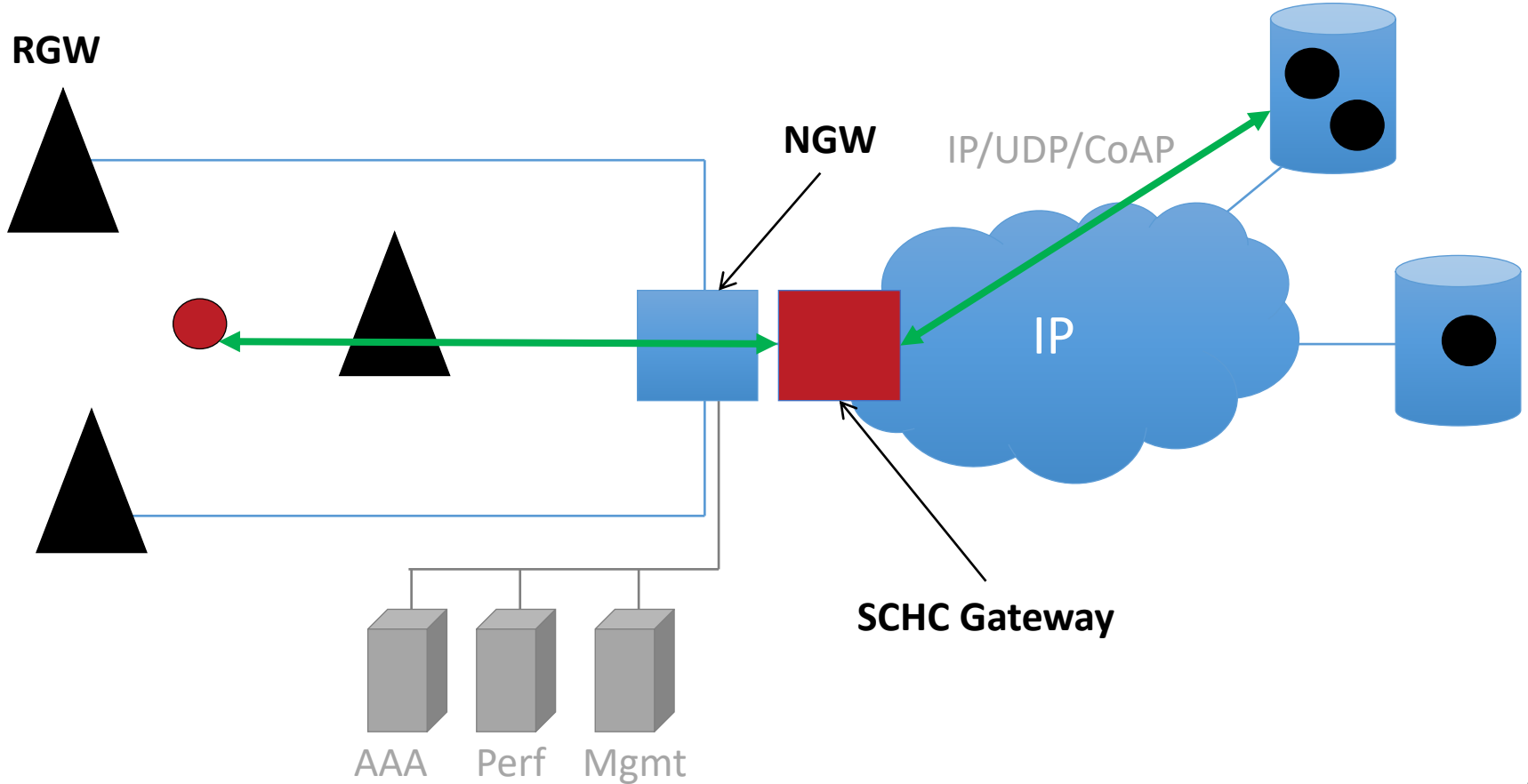
# SCHC Architecture



# SCHC Architecture

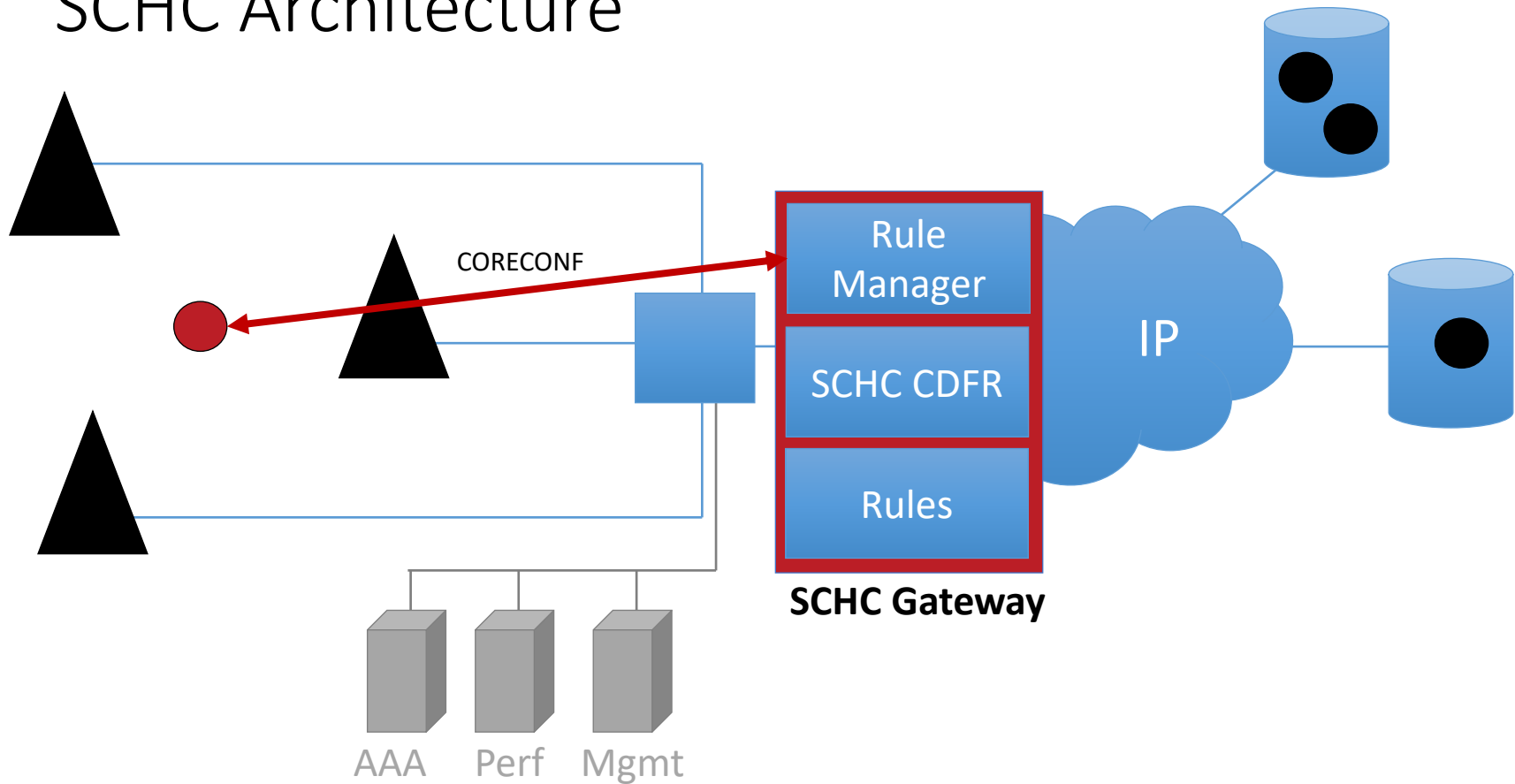


# SCHC Architecture

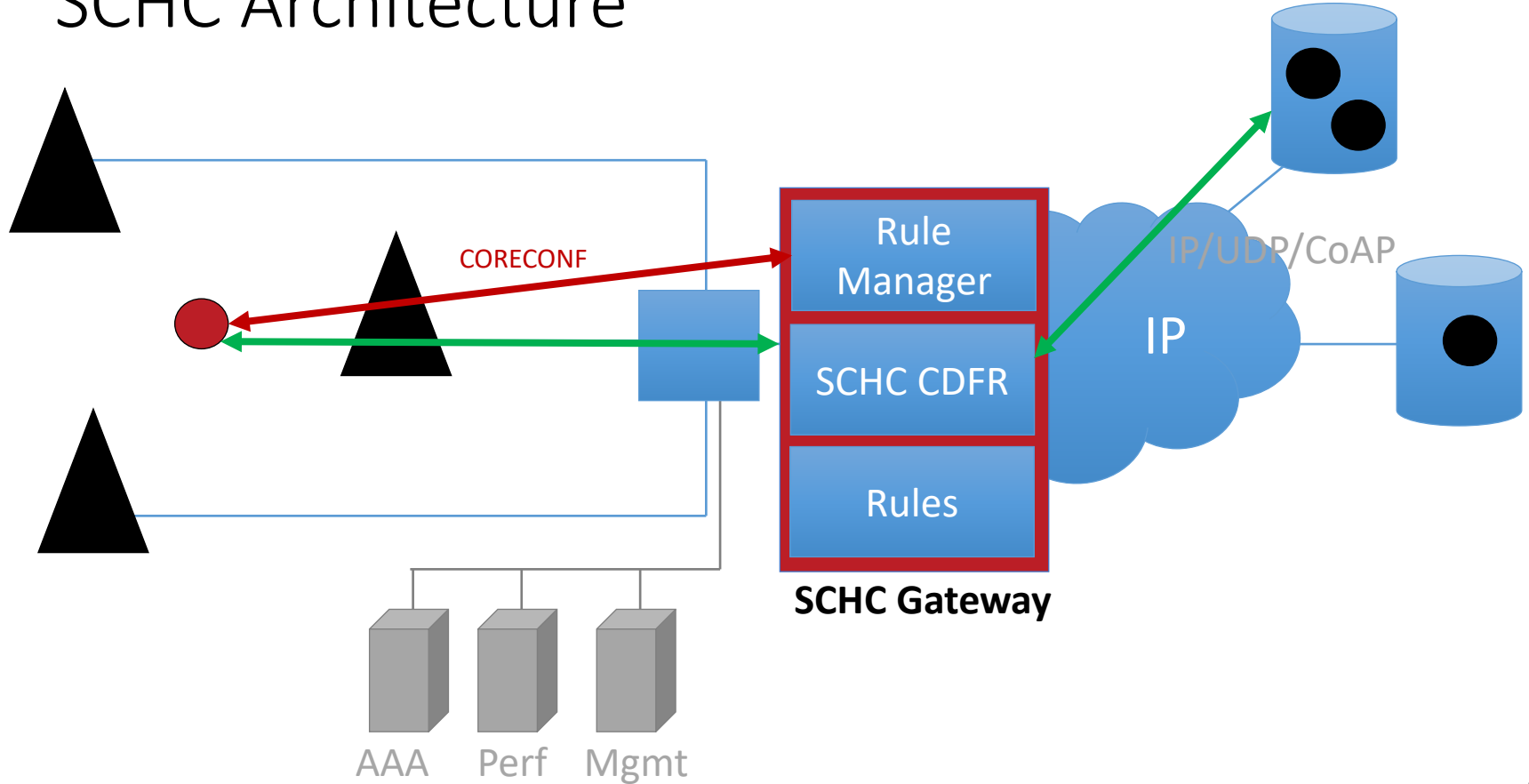




# SCHC Architecture



# SCHC Architecture



**AOB ?**