Utah's State Geographic Information Database:

Address Point Activities

Bert Granberg
NGAC Meeting, September 19, 2012

About AGRC

- **Mission:**
  - *"Encouraging and facilitating the effective use of geospatial information and technology for Utah"*

- **Activities:**
  - **Geographic Data**
    - State Geographic Information Database (SGID)
  - **Infrastructure** for:
    - Data and Imagery Acquisition, Sharing, Distribution
    - Map-based web applications and services
    - GPS base station network
  - **Coordination** of geospatial activities/resources among local government, state & federal agencies geospatial for enhanced ROI

Utah State Geographic Information Database (SGID)
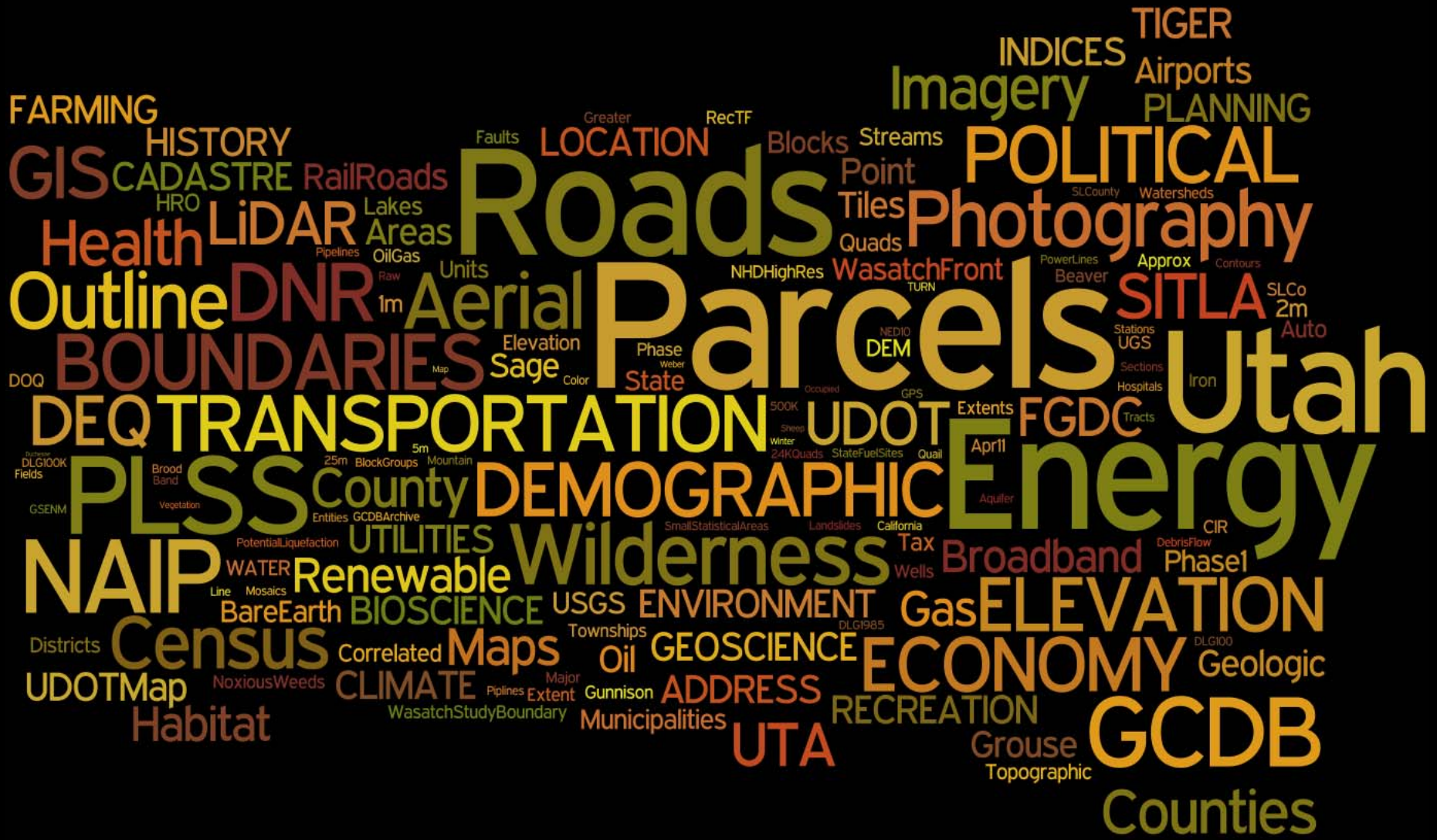
Local Data Stewards → SGID → Broader Data Users

Utah's Enterprise GIS Approach

- Serve many users

- Create once, used by many

- State Users of SGID Road Centerline and Address data/services:

  - Public Safety
  - UDOT
  - Tax Commission
  - Elections Office
  - Environmental Quality
  - Natural Resources
  - Commerce
  - Public Service Commission

Statewide resource for Geographic Information
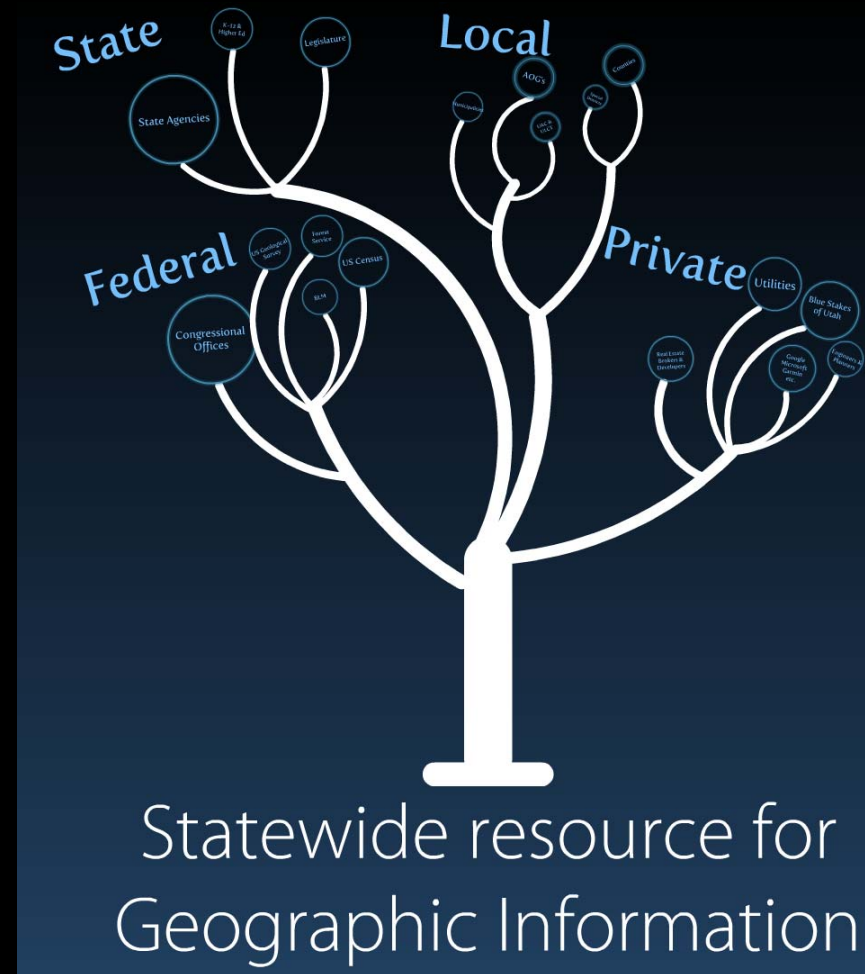
Address Points

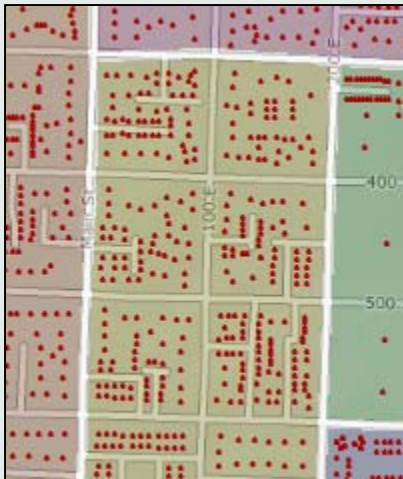## Building Statewide Address Points
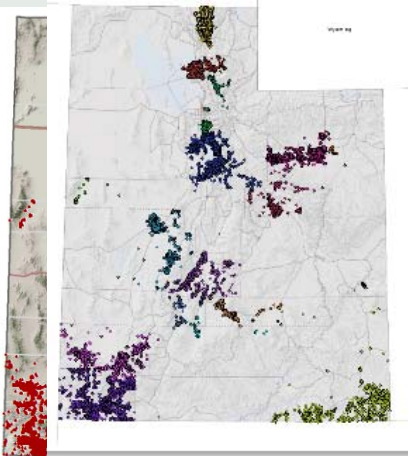
500000 + points
- 11 (of 29) complete counties
- 3 partial counties

Statewide Geocoding Services

- Address Pts used by Statewide and PSAP based geocoding services. Also,

- 811
- Mobile Phone Sales Tax
- Voter Registration DB
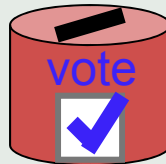- One Stop Business Registration
- Accidents & Citations

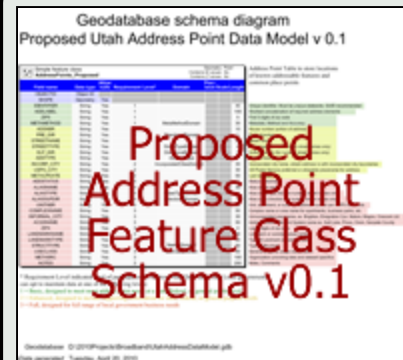## Maintaining Statewide Address Points

PSAPs, Cnty GIS

Feedback Loops:
- Clerks
- Integrated Map & Web Services
- Web Service Δ Reports
- Report a Problem

Address Point Standards

Geodatabase schema diagram
Proposed Utah Address Point Data Model v 0.1

Proposed Address Point Feature Class Schema v0.1

Coded Value Domains v0.1

- Addressing Stnrd → Data Model

- Address Ref Sys

- Tiered

- Keep it Simple

Address Points Are Multi-Dimensional

- Street or streetside service (accidents, trash pickup, etc)

- Entrances (building entrances, rural driveways)

- Site Address (structure, named facility points)

- Postal Address (mail, database integration)

- Sub Addresses

- Elevation/Floor/Room (urban structures)

Be strategic. But not to point of excessive delay...the approaches above all improve on range-based centerlines....80/20 rule as starting place?

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NextGen
9-1-1 concepts

Cedar Department of Public Safety Dispatch Center

Agencies dispatched:

- Iron County law enforcement, fire, EMS
- Arizona DPS in Virgin River Gorge
- State agencies in Beaver, Iron, Millard and Washington counties

Address data needs:

- Beaver, Iron, Millard and Washington counties
- Mohave county, Arizona
- Lincoln county, Nevada for mutual aid and road connectivity along borders
- Building locations, parking lots and facilities on the Southern Utah University Campus

"Networked"

"GIS"

& "Networked GIS"
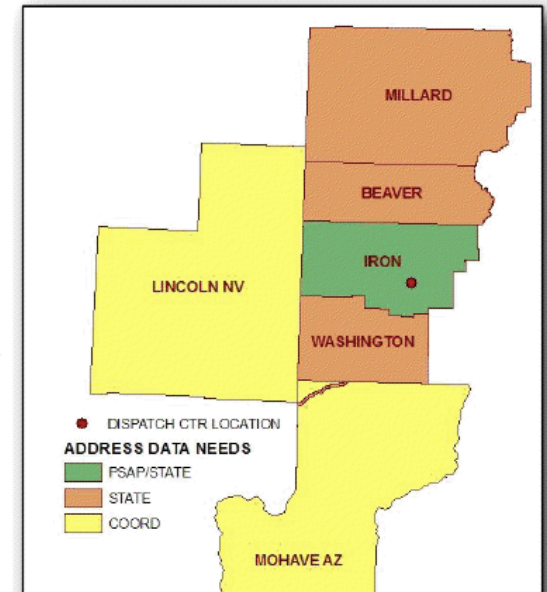
- Regional Call-Taking/Dispatch
- Mutual Assistance
- Shared Hosting
- Mobile Command
- Collaborative GIS Editing

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County Address Point Grants

- NTIA State Broadband Initiative funding
- ~ $15K per county
- Deliverables:
  - County-designated contact
  - Web-based Master Address List
    - To world
    - To 9-1-1
    - Down the Hall
      - Google Spreadsheet
      - FTP Shapefile, GDB, CSV
      - Web Service

- House Number
- Prefix Direction
- Street Name
- Street Type or Suffix Dir
- SubUnit (optional)
- Address System Name
- X Coordinate
- Y Coordinate
- UpdateDate

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File   Edit   View   History   Bookmarks   Tools   Help

MAL 2012 Scope of Work - Google D...   ×   Your County Master Address File as ...   ×   pub28.pdf (application/pdf Obj

google.com   https://docs.google.com/a/utah.gov/spreadsheet/ccc?key=0AhoOAQyOvGgadFp0SVlUd1NaWGhOS

Mail   Calendar   **Documents**   Sites   Groups   Contacts   More

Your County Master Address File as Web-Available Google Spreadsheet

File   Edit   View   Insert   Format   Data   Tools   Help   All changes saved

	A	B	C	D	E	F	G	H	I	J	
1	HouseNumber	Pre	Name	Type	Dir	Unit	AddressSystemName	X	Y	LastModified	U
2	345	S	Main	St		Apt B	Salt Lake County	424802	4512979	1/1/2012	op
3	120	E	400		S		Logan City	431128	4631016	1/21/2012	
4											

Master Address File   ▾   Metadata

Google SS: Low tech barrier

JSON Web Service: Easy for Dev/DBA team
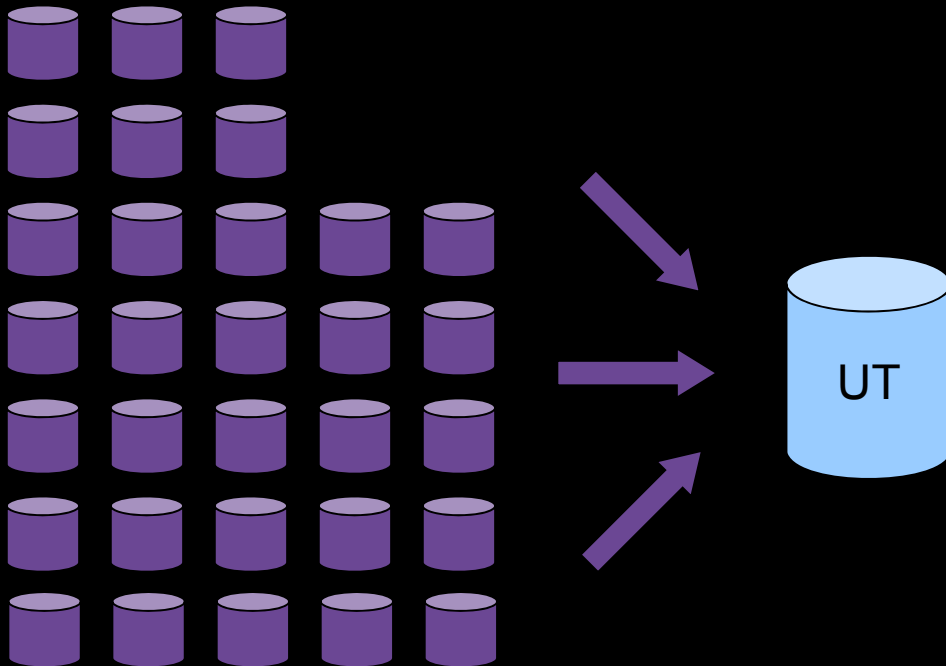
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            DirectionSuffix: "E",
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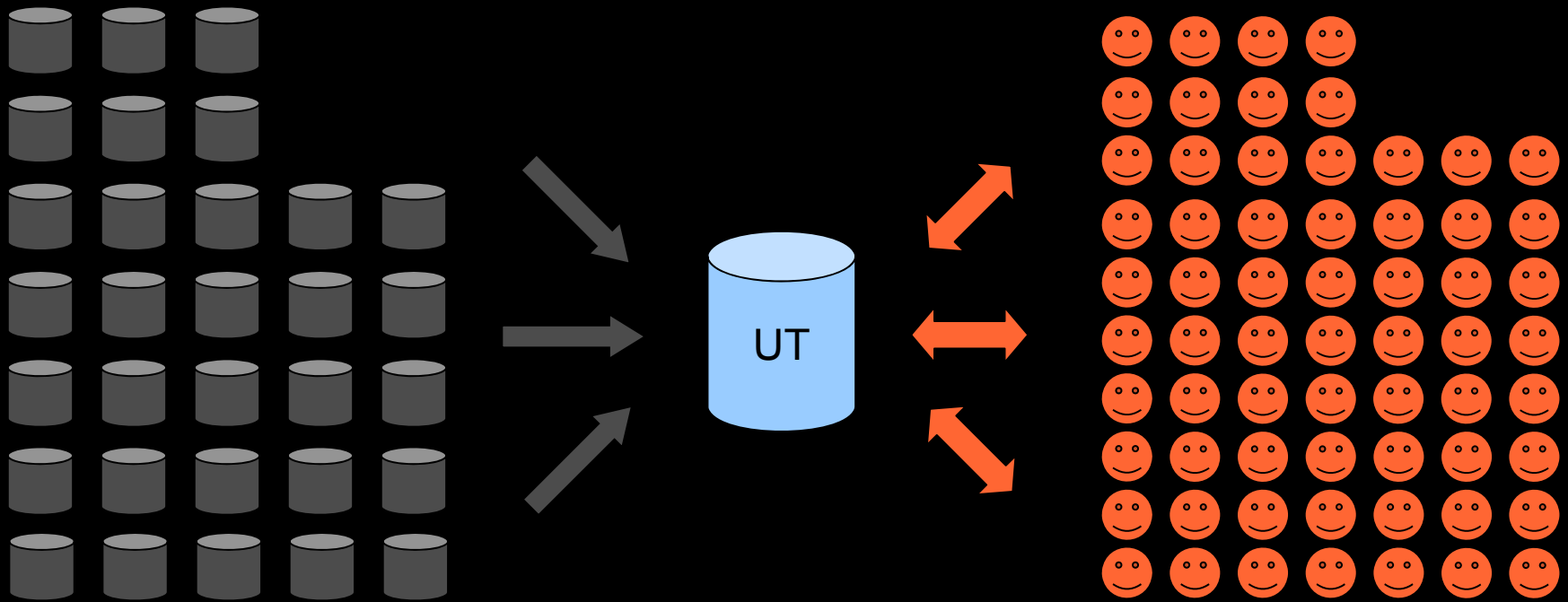
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Paradigm Shift?

Paradigm Shift?

Less Data Containers –

**Same Local Expertise, But More Connected,
More Standard, More Current Large Area Data Resource**

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Feedback

- Who should be able to view address point data and suggest improvements?

- How many 'trusted' editors should be allowed to actively make changes?

Feedback: App-Embedded Maps
County Clerks improve voter address points

More detailed info & examples:

- http://goo.gl/jKakl
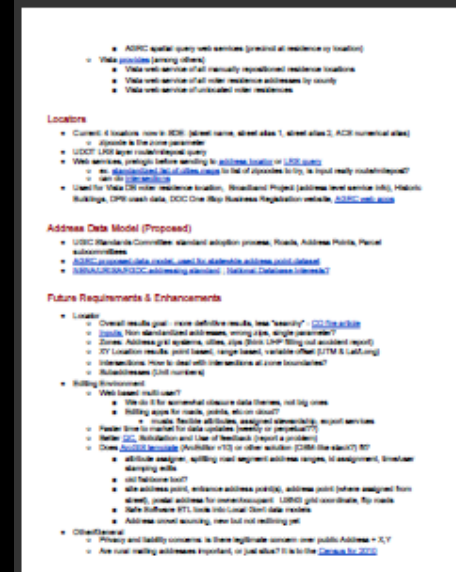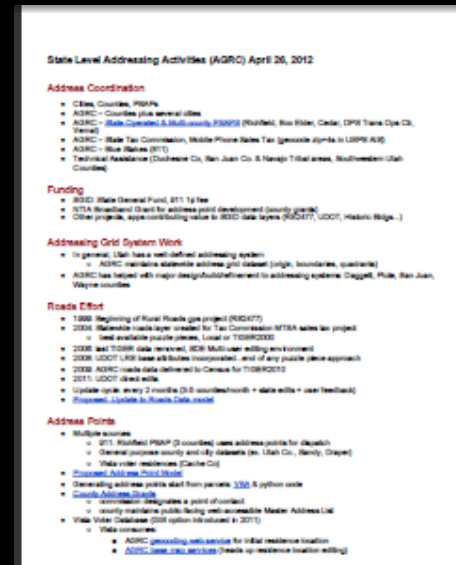
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