



The Notorious D.I.G.

And What To Do With Your Data

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136

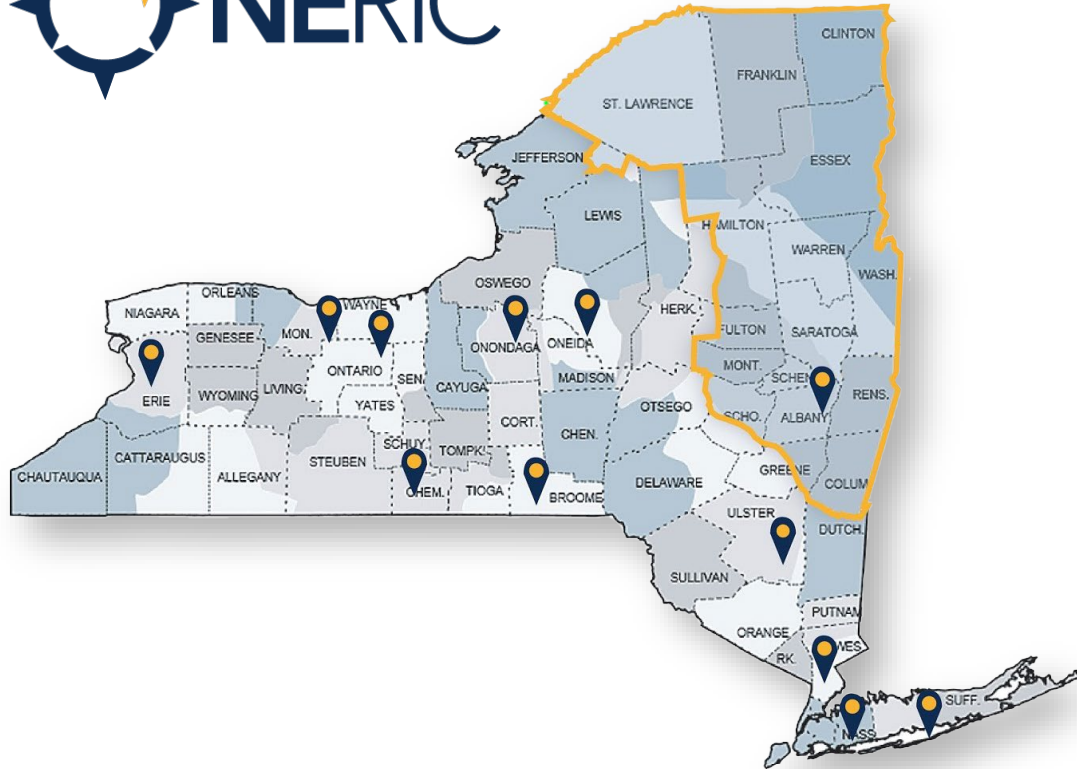
Districts

7

BOCES

75

other LEAs



94

SchoolTool

32

eSchoolData

6

PowerSchool

NERIC SMS/Data Integration Service

- As part of our SMS support service, NERIC provides A-Z support
- This includes *most* data integrations at no additional cost
- NERIC hosts 85+ schooltool districts at NERIC
- NERIC's eSD districts are hosted in the Illuminate cloud
- NERIC only transfers data directly to 3rd party vendor if that service is purchased through CRB/NERIC
 - All others are securely sent/made available to district and it is their responsibility to send to 3rd party vendor

Integration: Data pulled from one system for import into another on an automated basis.

130

Districts

1098

Integrations

11

Sources

187

Destinations

812

New*

410

Disabled*

125

APIs

687

SQL Scripts

As of 3/3/2020

Northeastern Regional Information Center

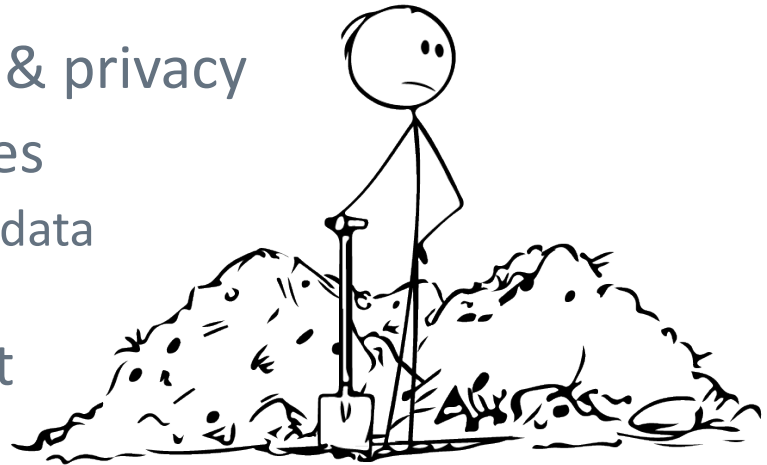
*Between March 2018 and March 2020

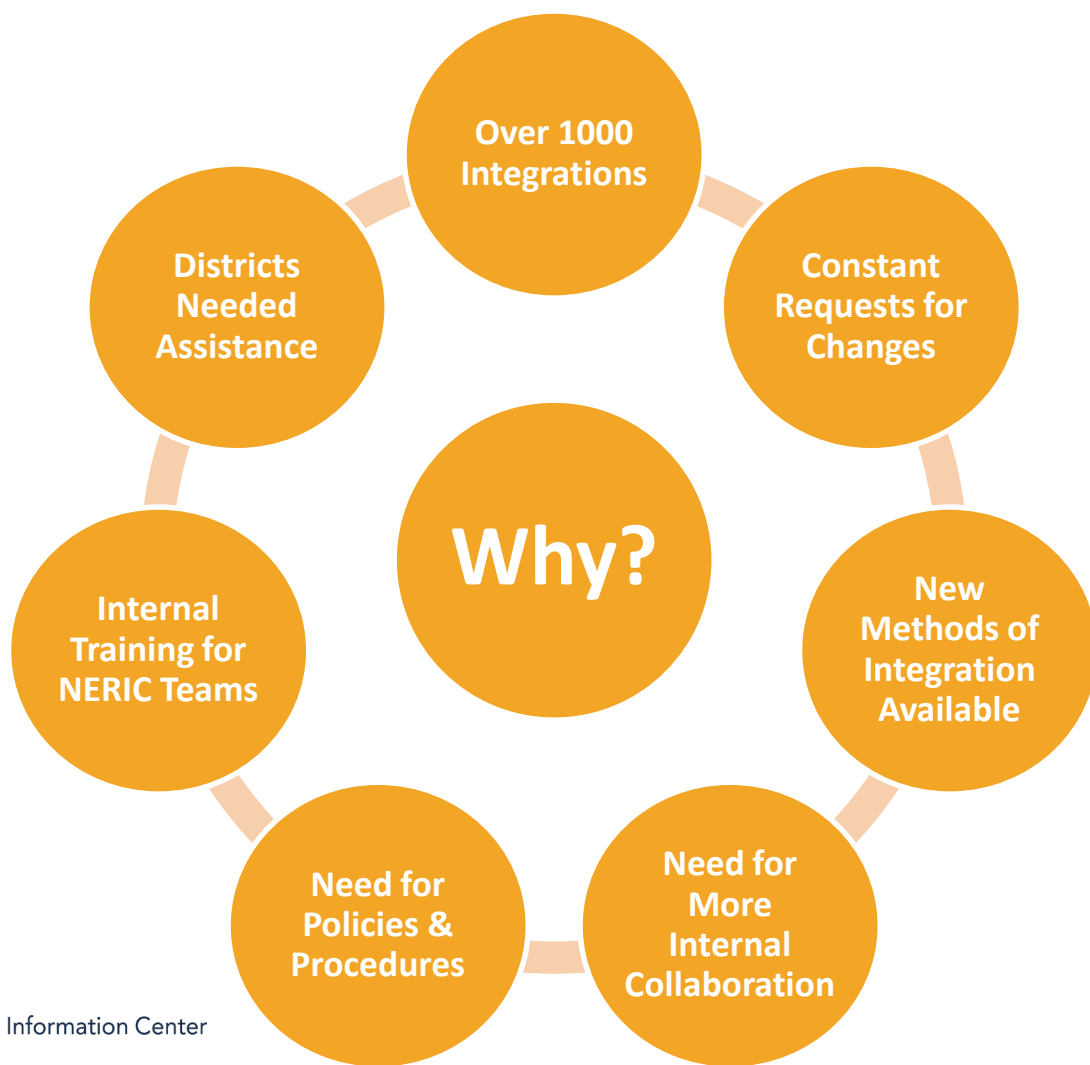
3/5/2020

4

Before the DIG

- Overload of requests
 - No consistency on how requests were handled, done as district's needed but districts often didn't understand what they were requesting
- New transfer methods
- Increasing concern over data security & privacy
- Requests for extracts from new sources
 - Lunch balance to calling systems, HR/staff data to calling systems, imports back into SIS
- Unclear who was responsible for what
 - Siloed teams, no workflow
- Vendors contacting RIC directly on behalf of district





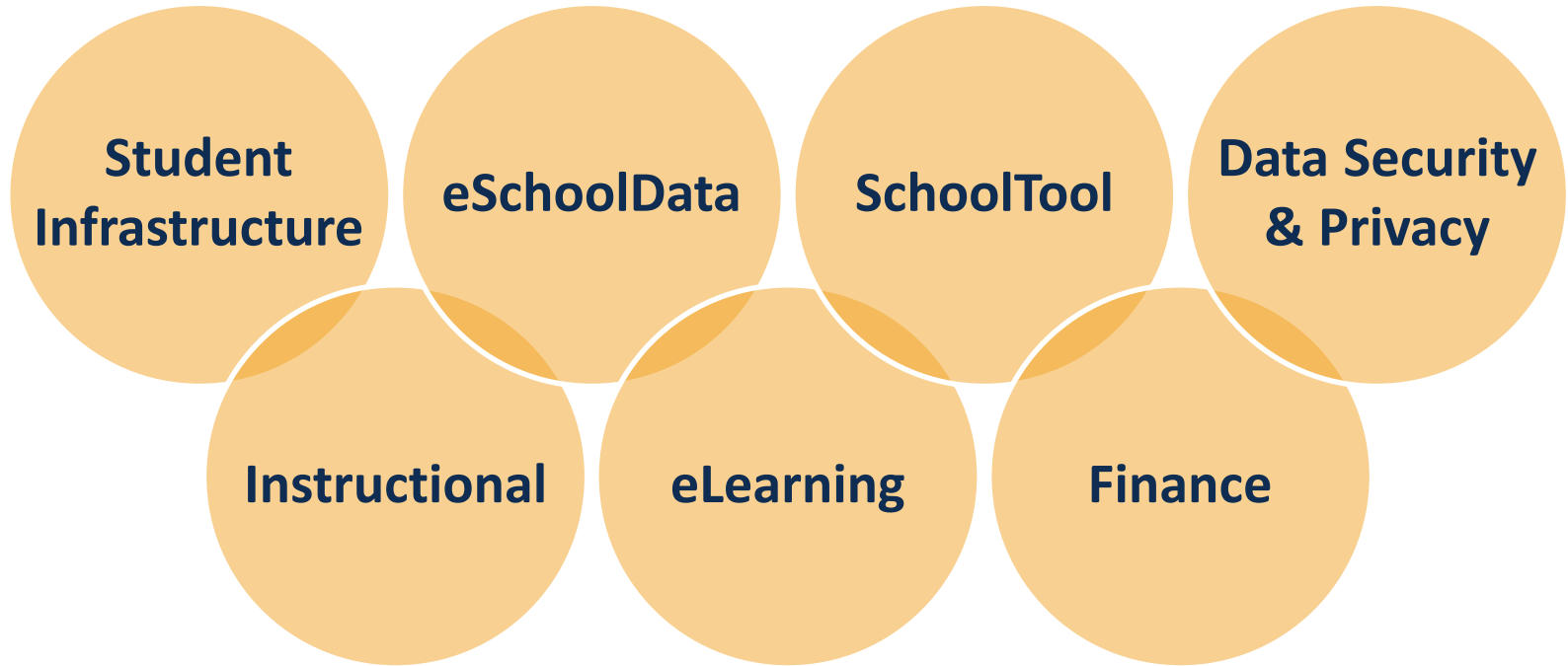
How?

- Identification of a Project Manager
- Committee creation including members of the Student Infrastructure, eSchoolData and SchoolTool teams
- Research on best practices and current processes (if any)
- Dedicated time, freedom and support from administration
- Expansion to include other teams/departments

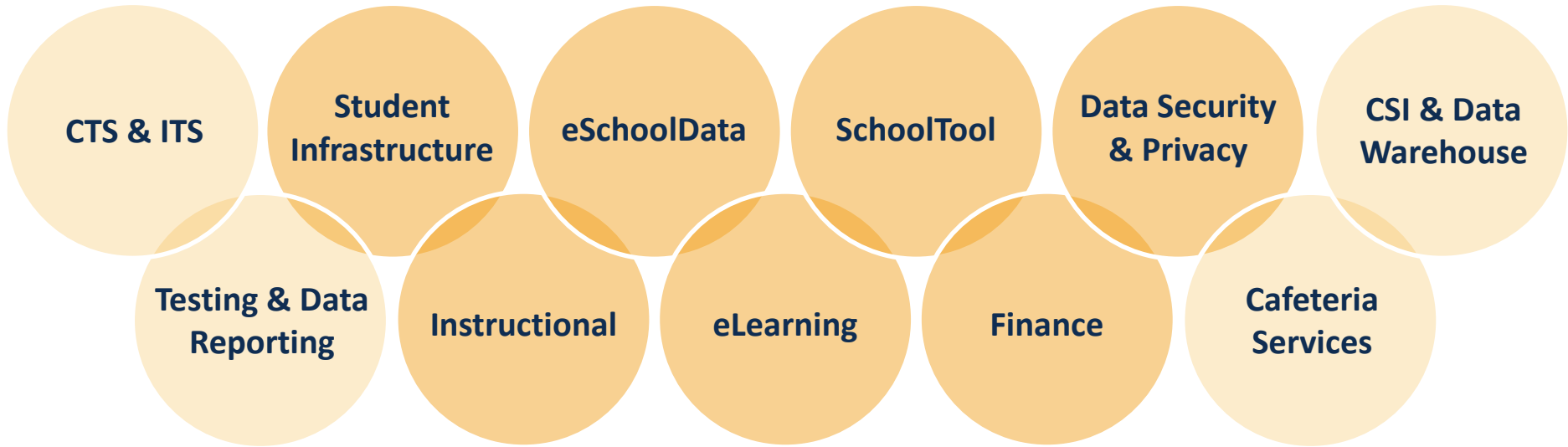
Goals

- Understand what is happening with integrations
 - What data is going where?
- Standardize approach to extracts and processes
 - Why changes are being made?
- Data security and privacy concerns
 - Who is getting the data and why?
- Assist districts in understanding their data movement
 - How can districts keep their data secure while integrating softwares?

Data Integration Group



Data Integration Group



What did we do?

Started meeting on a regular basis

Collaborated with other teams within NERIC

Created workflows of processes

Restructured existing database of integrations

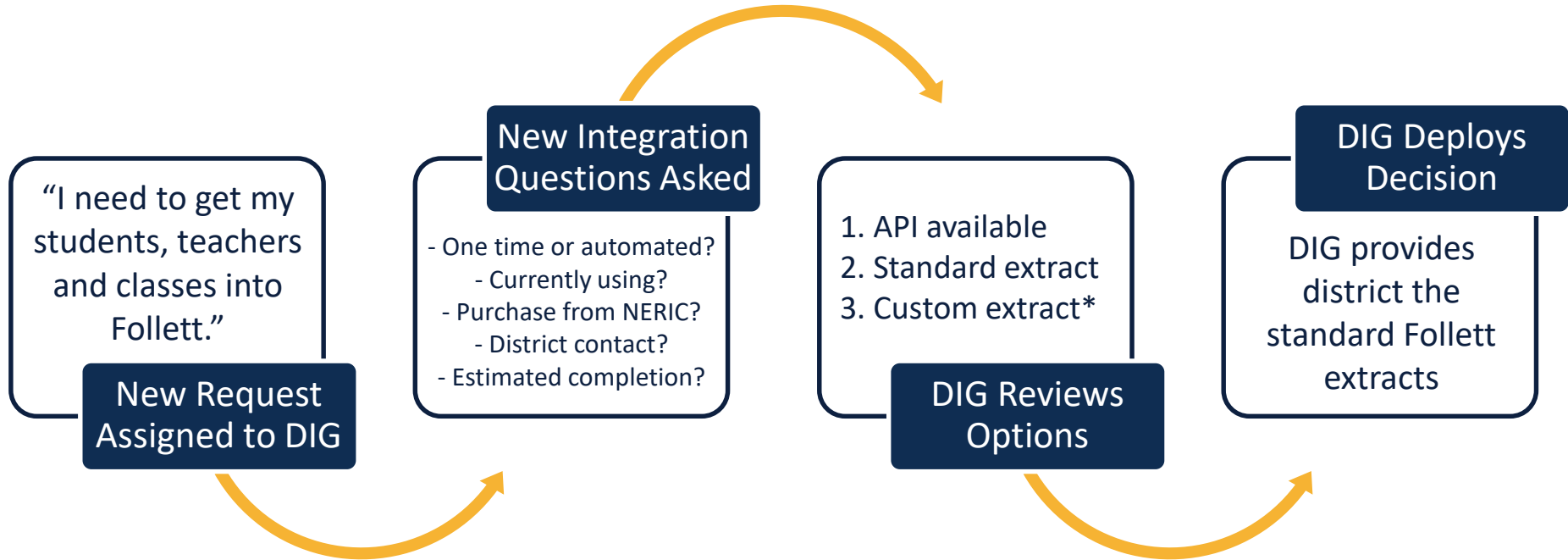
Captured data movement

Generated reports from integration database for support

Created internal server of extracts for support

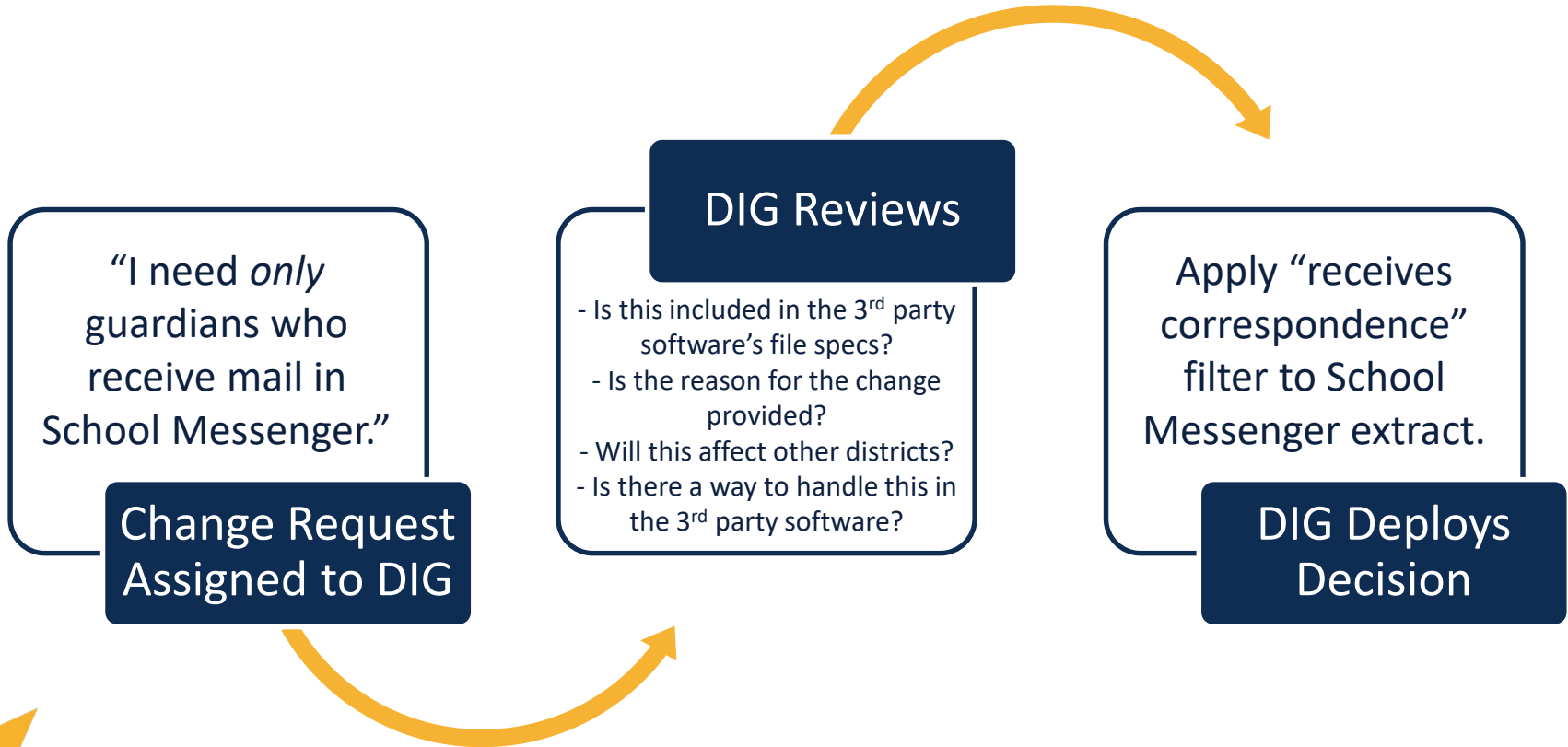
Started summer clean up review with districts

New Request Process

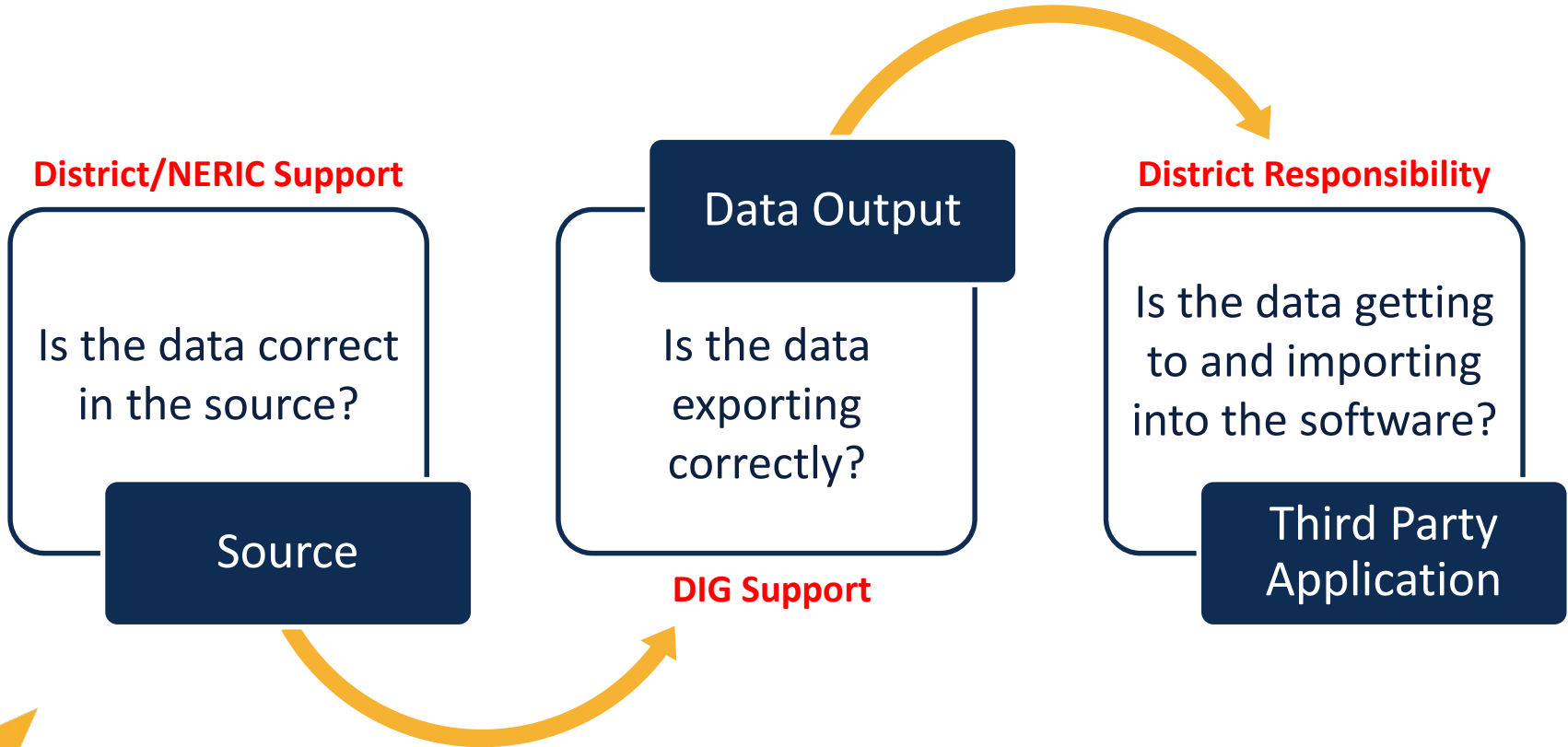


*Fee may apply for custom extract

Change Request Process



Support Process



Best Practices

Create a district integration team

- No one person knows all the data or how it's moving or why
- May include Director of Technology, Network Administrator, CIO, SIS Administrator, Instructional Technology Staff, Administration, DPO, etc.
- Each software may have a different process for getting data into their system
- Have an internal support process
 - Who does your staff contact when data is not syncing?
 - Is the data correct in the source?
 - Is the data getting to the 3rd party as expected?

Best Practices

Keep a list of the who, what, when, where, why and how of data movement

Source	Destination	District Contact	Method	Filtering	Path	Timing	Start Date	Ticket Number	Local Location	Notes
Clever	FastBridge	Tech Director	Clever	K-6 Only	Clever > FastBridge	2:00 AM	7/10/2019			
Clever	TypingClub	ES Tech Teacher	Clever	4-5 Only	Clever > Typing Club	2:00 AM	9/10/2018			For computer class
eDoctrina	eSchooldata	SIS Admin	eSD API		eDoctrina > eSchoolData	12:00 AM	10/28/2019	7638		Teachers can push assessment grades
eSchoolData	Castle Learning	SIS Admin	RIC One API	HS Only	eSD > RIC One > Castle Learning	overnight	4/12/2016			
eSchoolData	Clever	SIS Admin	eSD Zap		eSD > Clever	1:00 AM	9/20/2013	1394		Clever feeds data to Achieve3000, Rig
eSchoolData	edVistas	SIS Admin	eSD API	ES Only	eSD > edVistas	1:00 AM	7/7/2019	4682		
eSchoolData	Frontline IEP	SIS Admin/CSE Chair	eSD Service		NERIC	10:00 PM	8/31/2016			
eSchoolData	ParentSquare	Communication Team	Backend Script	Parents w/ Corre	NERIC > District SFTP > ParentSquare	11 PM / 10 AM	7/16/2019	2849		attendance pulls from eSD at 10 am
eSchoolData	Tools4Ever	SIS Admin	eSD API		eSD > Tools4Ever	overnight	10/3/2014	3845		Pushes staff emails into eSD
Frontline IEP	eSchoolData	CSE Chair	eSD Zap		Frontline > eSD SFTP > eSD	3:00 AM	5/10/2019	3189		Writes "Special Education" status in e
nVision	ClassLink	Tech Director	Backend Script		NERIC > District SFTP > ClassLink	9:00 PM	12/17/2018	3492	John's Laptop	
nVision	ParentSquare	Communication Team	Backend Script		NERIC > District SFTP > ParentSquare	11:00 PM	9/15/2019	3482	Server X	Staff for emergency calling only
Transfinder	eSchoolData	Transportation Director	eSD Zap		Transfinder > eSD SFTP > eSD	2:00 AM	1/13/2015	2364		

bit.ly/digsamplelist

Best Practices

Evaluate the integration before getting started

Does this integration:

- Align to your district's goals?
- Keep data secure and private?
- Add significant value to daily workflow?
- Achieve centralization of data and preserve data integrity?
- Not impact state reporting?
- Work in an automated fashion?

Best Practices

Ask potential vendors questions about integration options before purchasing new software

- What are the fields and data points that are integrated?
- Is the integration real-time or schedule data sync? API or flat file transfer?
 - If sync, when? How often?
 - If a flat file, can you provide us with your file specifications?
- What is the relationship between your software and the system you want to source data from? Is there active collaboration, communication and support?
- How long has the integration been running in live environments? Do you have example districts in NYS or our region that are utilizing this integration?
- What is your timeframe for implementing an integration? Is there a testing period?
- Are there any caveats, known issues or limitations that existing customers have reported?

District Responsibilities

- Ensure **data is up to date**, clean and comprehensive in all source systems
- Verify data is getting to and **loaded into destination**
- **Keep a list** of what data is being pulled and where it's going
- Be vigilant with **disabling integrations** no longer needed
- **Communication** with third party software for implementation and support
 - NERIC receives communication from districts
 - NERIC will enter tickets/communicate with **NERIC supported source vendors and RIC One Central Support team** on behalf of the district
 - NERIC does not communicate directly with 3rd party vendor
 - Districts must communicate information to/from 3rd party support

Successes!

- Collaborating with other departments within the RIC
 - Policies and processes in place
 - Strong involvement with the Data Security and Privacy Service
- District awareness of what data they're sending where and **why**
 - Disabling processes when no longer needed
 - Increased awareness of ED Law 2d & Data Security
- Help districts move to a more secure method of data transfer
- Streamlined troubleshooting / spread knowledge of configurations
- Charging for customization beyond vendor specs, SIS capabilities and one-off's

What's Next?

Internal
documentation
& training

Move current
extracts to
standard file
formats or API

Standardize
filtering
parameters

Grow district
knowledge of
integrations

Research new
methods for
integration

Questions?

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bit.ly/digdatag

bit.ly/digsamplelist

bit.ly/digbestpractices

