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Home Resources Resource Center

TraceLink Network and OPUS Integration Foundation



Reference

Link: https://www.tracelink.com/resources/tracelink-university/introduction-opus-foundations-presented-futurelink

Caitlin Czulada: Today, I am going to try and dive deep into some of the components that make TraceLink different.

You heard from Bark this morning about how important it is to all of your businesses to get that digital exchange of data. That digital exchange of data is really going to help orchestrate your business processes.

As many of you probably know, digital exchange of data is not new. EDI has been around for 50-plus years in the industry. It's used to exchange X12, EDIFACT, other documents. Yet why aren't we all fully digitalized? Because it's hard. It's hard to do that with external exchange, with external partners that have different systems, that have different formats.

When TraceLink was looking at this problem, we tried to flip it on its head and figure out, how can we make it as easy as possible for all of you here in this room to be fully digitalized with all of your trade partners out there?

What I'm going to do is I'm going to go through all of the different building blocks today that make TraceLink so different, and how we think we have taken that really difficult problem of digitalizing your processes and made it as easy as possible so that no matter who you are and no matter who you're trying to connect to, you can make it and you can do it really easily.

How do we start? As Bob pointed out, the first thing that TraceLink is based on is the network. Out there, you've probably heard us say the network, you've heard other companies say the network. We think of networks as these digital exchanges of information.

As Bob was explaining, a lot of the other digital exchange systems out there may be not multi-enterprise. They're multi-tenant, which means for every integration you have to build, you have to build a unique point-to-point connection to that company.

The way TraceLink built our network is that we created a single entity or a digital twin of you on our network. If we go back to our example of the social network, on the social network, how many of you are on there? Probably everybody.

How many of each one of you exist? One, because again, if there were more of you, how



would you know who you're talking to? How would you know that you're sharing cat pictures with this Jill versus cat pictures with that Jill.

Same thing that we did here. If you're trying to exchange data on our network, there can only really be one of you. That's really, really core.

When we say network, we mean that there's these digital twins, and there's over 290,000 of you out there on our network already. You can be sure that TraceLink has uniquely identified you, you being your supply chain entity, using your identifiers like global identifiers like DUNS Numbers, GLNs, DEAs, and things like that. We authenticate every entity that's on our network.

By doing that, you can trust that when you're making that connection to the other supply chain entity, that you know that it's the right one. When you're connecting to that DHL, you know that is the single DHL that exists on the network and that you can be exchanging data with that verified partner.

This is really core. This is what drives all of the other capabilities because again, if there were more than you on the network, you wouldn't be able to do all of the things that we talk about.

That network is made possible by a team that we have at TraceLink called our network success management team. This is a global dedicated team at TraceLink that's responsible for all of those onboarding activities.

The first activity is adding you to that network as that single authenticated digital twin, and then maintaining that network connections in those network entities.

One of the things that we learned really, really early on is that not only do you as customers in the room need support, but all of those other entities that you're connecting to, they also need support.

We built this team early on as a dedicated team that manages that for you. You can think of them as an extension of your own team. They are there to make sure that the trade partners on the other side that you're connecting to are always up to date, that their integrations are working. If there's any issues, they can support them.

Not only did we build this network, but we learned that it has to be managed and maintained. If we put all that work on all of you, you would need to hire teams and teams of people to do that work for you. What we can do and the reason we can do it is because we can scale.

If you had to maintain the connections for DHL, there's 100 people of you in the room, you'd have to have 100 people who's responsible for managing that one connection to DHL. By TraceLink taking that work on for us, we can scale up because again, we're only managing that one entity and that one connection to that trade partner.

You can think about the network success team as reducing all of your onboarding costs, all of your maintenance costs, and overall, supporting of those entities.

We built the network. We realized that there can only be one of you, and then we decided, "Oh, OK. Well, how are we going to manage this? How are we going to maintain that?" So we created our network success team. Together, they come together to manage and maintain that network.

Then we have the B2N Integrate Once. We talk about this a lot, you're integrating to one time. If there is more than one of you on the network, what can't you do? You can't integrate once. By definition, if there were many of you and you had lots of connections, you'd be required to make n number of those connections.



Our single digital twin on the network that's managed and maintained by us allows for us to do B to Integrate Once. What that means is that for your company, anytime you're exchanging a transaction with TraceLink, you only ever have to build that integration one time for each transaction.

There's no need for you to have and maintain costly point-to-point connections. For every transaction, you only need to manage that once. This is all facilitated because we have one entity on our network. We manage that and maintain that for you by your team, and that allows for this B to Integrate Once model.

How does that work? You've probably built data connections before, and you say, "OK. Yeah, but I need to talk to my trade partner. I need to understand if they use X12. And if they do use X12, well, I need to understand what data formats they use and what fields they want where."

We've all been through this. It's a very painful, long process that takes months and months to do. We thought about that. We said, "OK, great. We have this network. There's only one of you. You can integrate, but how do we manage those connections between you have one format and I have another format?"

Bob alluded to it a little bit. It's what we call the canonical. That canonical format allows us to do the Integrate Once. Essentially, what the canonical is, is a shared data format that our applications use to process in the back end.

Our applications only ever need to speak one way, and that way is the canonical. Our applications never need to understand what an IDoc is. Our applications never need to understand that you speak in EDIFACT in one way and your partner speaks in EDIFACT in a different way.

Our applications are programmed to learn one and one and only language. Then as we alluded to earlier, we have this concept of a transform. A transform takes this data format and maps it into our canonical.

If in your file, you call the batch number batch, we understand that in our back end, we might call that a lot number. If your partner wants to call it a lot number and wants it six rows down, well, we're going to take that lot number and we're going to put it six rows down.

No matter how you're communicating, no matter how you're exchanging data, whether you want to use a traditional EDI or maybe you don't want to buy another system and you want to use your SAP system and they speak IDoc, we will take those formats, and again, we're going to do all the work for you because we're going to map it into a shared format.

You only ever have to worry about you. You never have to worry about what your trade partner wants. You never have to worry about what connection they need because TraceLink will then map that out of our shared format into something that they understand and then something that they can consume.

Not only do we do that, but we do that for you. I just talked about the network success management team that does that for you. Not only do you not have to worry about it, we also do it for you.

No longer do you have to have those long, painful conversations about, "OK. Well, I map it this way. I need this file format. I need it to say this," etc., because TraceLink does that all for you.

Now we have our network, which we manage internally by our network success team. That allows you to Integrate Once. Then we have our Interoperate with Everyone, which allows



you to not necessarily have to map to somebody else's format.

One thing I didn't mention but Bob alluded to a little bit, maybe that company doesn't have a system. We also have the user interface. The user interface allows companies to enter the information manually, and then it automatically gets mapped in the canonical.

Even if they don't have a system on their side, you can still get that same digital exchange of information into your internal system because the user interface is essentially just acting as a way that you would enter your information into that canonical.

You might say, "Oh, the big partners, they can integrate. They have systems," but again, to earlier's point, if you don't have all of your data, you're still exchanging emails and PDFs, and people are still required to do manual work.

By having a user interface that maps into our canonical, that eliminates that barrier of that company on the other side maybe not even having the ability to do that digital exchange. You might say, "That sounds great. We can build all these integrations," but it's going to be hard. It's going to still take a lot of time. I'm still going to have to make those links, those connections, etc.

TraceLink has a concept of linking. A link is essentially a connection between two entities on the network. Then again, as I mentioned, because there's only one of you on the network, when you make that connection, you can be assured that you are connected to that supply chain entity that you are looking to exchange data with. You can trust that that's the entity that you're looking for.

Linking is done through simple configuration. In these afternoon sessions, depending on where you go, you'll be able to actually see this in the user interface. What you're going to do is essentially, you're going to find that supply chain entity. As we mentioned, we have over 290,000 of them, so there's a good chance that they're already on the network.

If they're not, don't worry. We have our network success team that will take care of that for you. Through simple configuration, you'll be able to already link up. It happens automatically, assuming you find the correct entity that you're looking for.

Once you're linked, if you guys are both already exchanging data on the network, there's no new work needed. If you're sending a PO because you've integrated for another trade partner and that other party is already receiving purchase orders through TraceLink, all you need to do is tell them that you're ready to exchange data, and there's no more work.

There's no more calling them up. There's no more spending months and months on the phone trying to figure out, "Can you take a digital purchase order? What format do you want? How does your system work? What connections do you use, AS2, B2B, all the rest of this stuff?"

Through simple configuration, as long as the entity is already exchanging data, you can do the configuration and start sending them data immediately. Imagine if you could get POs in one day. It's possible, but it's only possible because of all of these foundational things coming together to make it possible.

If there was multiples of you on the network, it wouldn't be possible. If someone wasn't there managing and maintaining that for you, that wouldn't be possible. If you still had to do data mapping, wouldn't be possible. If we didn't have our Integrate Once and our canonical model, all of that wouldn't be possible. All of these things have to come together to make this vision possible.

You've linked, you're exchanging data, that sounds great, but what about the user interface? I want to be able to see the data. I want to be able to see what data I'm exchanging.



TraceLink has this concept of multi-enterprise applications such as MINT.

Essentially, they allow customers and trade partners to have a shared truth of their business. We do this by, as we mentioned before, similar to the social media. Because there's one of you, you have the same user interface no matter who you're exchanging data with.

If you have a trade partner and they're connected to 10 TraceLink customers, imagine if they had to log in to 10 different portals. That would be difficult. It would be cumbersome. They might not want to do it. They might forget what their passwords are, as we all do because they expire every 90 days.

This way, because there's only one of you, you can log in and you're able to see all of the information on one portal, and same with your customers. Your customers no longer have to go to many disparate systems, and logins, and all of the different things. They're able to do that through TraceLink.

Because the entities on the network are verified by TraceLink -- we assure that the entity you're connecting to is correct. We validate all of their identifiers. We make sure that those people work there -- that solves all of that security concerns about giving them access to your internal systems because they are contained within their company on the network.

They're not logging in as you on the network. They're logging in as them. They're logging in as that supply chain partner. You don't have to worry about, "Oh, well, I can't give an external person access to my system." You're not. You're giving them access through the data that they have now visibility into because you did that linking configuration step.

You link to them. You said, "I want to exchange data with you. I am making this connection," and the system knows that, "OK, they should have access to that data."

We solve those really difficult security concerns about, "Well, how am I going to give them access to my data, assure that they can only see what they're responsible for? I don't want them to see things that they're not able to access," etc. We do all of that as well.

The example I like to give is today, you probably work in Excel. You email them to everybody. Then the second you email them, they're out of date because somebody changed it on their own computer. You don't have a copy of it, and you don't have the latest information.

If you guys are familiar or use Google Sheets, Google Sheets is that shared view. If I log into the Google Sheet at the same time as you and you change the PO, the date of that PO or that number, I'm going to see that immediately.

You can think about these shared workspaces as that single view that everybody has real-time information that are constantly up to date, and they can only see their slice of the world so you don't have to worry about them having access to all of their information.

This is our tower of success. This is how we're going to make you all so successful. You are one company on the network. There's only one of you in the supply chain, so there should only be one of you on the network.

We manage that through your dedicated network success team. You can think about them as just an augmentation of your own teams. Those are people you don't have to hire because TraceLink has done that for you.

Then we have your single integration to the TraceLink network. We hear all about networks all the time out there. That's a really important word.

If they haven't taken the time to ensure that you are a single entity and that it's being closely managed, you're still going to be in the same place where you're going to have to be



building all these point-to-point and individual connections.

It's really important that you can trust that those entities are there. That's what makes that single integration to TraceLink work.

Then our Interoperate with Everybody. Everybody maps in their own format. We don't want to spend all that time and effort making all those mapping conversations and figuring out what formats that we need. TraceLink does that through our canonical model.

Then scale your business through configuration. Even if you were able to make all these connections, you would need IT staff and all of that stuff. Through the simple connections on the user interface, that frees up your IT staff to do other work, other things that are important to your business.

It allows the business people that have those relationships with the trade partners to actually control all of this. You don't have to necessarily rely heavily on your IT staff like we had to before.

Then as we mentioned, everybody has the shared view of the data. Data's great, but what can we do with that data? You can't do things without that data if you can't see the data. It's important that you guys have that shared view of that data. That is the top of our tower of success.

Woman: Does anyone have any questions for Caitlin before she [laughs] heads off the stage?

Audience Member: I understand that you are very good at pharma. You have set 250,000 partners. How long it will take for you to implement one-to-one connection with 3,000 suppliers that are not pharma-related, like a CPG?

It's because we need to get evaluation. It will take months, years, or something. Maybe it's something that we can consider to invest in another area outside of pharma as well.

Caitlin: Just like with everything, the first connection, as I mentioned, is going to take the longest. The first time that that entity needs to start exchanging data with the TraceLink network, we would reach out. We would get their data formats. We would build that for them and set up their B2B.

The next time anybody wanted to start exchanging data with you, you can do it immediately. There's no requirement there. On the first part, it's TraceLink's responsibility to do that. Even if you did need to come, set up 3,000 partners, it would be TraceLink that would take on that work for you and do that for you.

[background music]

Caitlin: Again, as soon as you connect once, there's no work needed to do it the next time.