



# 1E: Enabling Carollo Engineers to maintain productivity when working from anywhere

*“Especially when the 2020 pandemic hit and work-from-home scenarios became the norm for us, we knew that we needed to implement and utilize Tachyon as quickly as possible in order to increase our remote insight into the configuration and performance of our external endpoints.”*

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**Founded in 1933, Carollo Engineers is a water engineering firm that specializes in the planning, design and construction of water and wastewater facilities. Carollo has grown to over 1,100 employees in more than 50 offices throughout the United States.**

Carollo and 1E have been working together since 2009 when they were migrating from Novell to Microsoft. They used SCCM for certain tasks but the 1E software consistently performed better.

At the time, Microsoft was using 1E products in their own environment. It seemed that they were taking the concepts and most-used features of the 1E products to incorporate into their own SCCM feature updates. Even as Microsoft improved on their own software, 1E always seemed to stay two steps ahead of them with new, innovative products and technologies.

With a multitude of use cases, Carollo has utilized 1E Nomad, Shopping, AppClarity and, more recently, Tachyon to solve some of their biggest IT challenges.

## The Challenge

The main challenge for Carollo came when work-from-home became the norm almost overnight. They lost visibility from SCCM and had no external access to employees' laptops when they were not using VPN.

They also had a problem with license sharing; something they hadn't experienced before. One particular program uses a pool of expensive shared cloud licenses. Despite repeat reminders and requests, employees were frequently leaving the program open, leading to an increase in support tickets when licenses were being denied.

This situation was equally frustrating for IT and employees. While employees weren't able to use the software that they needed to do their work in a timely manner, IT wasn't able to take any action to remediate the issue other than send out "pretty please" emails to remind employees about shared license etiquette.

The original plan was to install and configure a Cloud Management Gateway in their environment to provide SCCM interaction with their endpoints outside of the firewall, but this would have incurred significant costs.

## The Solution

One of the first tasks was to set up a Tachyon server in their DMZ to allow communication with computers outside of their firewall. This allowed them to see, ping, and manipulate endpoints that weren't connected through the VPN or didn't touch the network on a regular basis.

Establishing that communication with endpoints outside the firewall enabled IT staff to supplement the "pretty please" emails with action. They were able to find and remediate configuration issues, make system changes, and have more control over endpoints that hadn't touched the network for a while.

Tachyon is designed to work in real time and is extremely versatile, so the results are almost immediate. Combined with Tachyon Exchange, where contributors are able to bundle instruction sets into 'Product Packs', they were able to extend and automate Tachyon instructions. This allowed them to configure a command to schedule Tachyon actions that killed the program every night—a process that has saved the company tens of thousands of dollars, not only in unnecessary license purchases, but also in support manhours for troubleshooting, researching, and remediating issues. This action can now also be applied to other software.

## Benefits

IT is able to communicate with endpoints outside the corporate firewall to identify and remediate issues

Trusted, accurate results from real-time queries and information leads to faster identification and remediation of issues

Saved reports provide a history of results

Shared licenses no longer denied due to 'killing' the program every night

This has reduced support manhours and required experience levels and the need to purchase additional licenses, saving tens of thousands of dollars

## The Future

Tachyon is a relatively new deployment for Carollo, but its versatility has already empowered them to think outside the box to find solutions to their problems. Now, whenever they have a new problem, the first question is always, "How can we use Tachyon to overcome the issue?". With a combination of skillsets and ideas, they're able to get the desired result using Tachyon.

Carollo is constantly thinking of new ways to utilize Tachyon instructions and actions. They look to Tachyon Exchange for new instruction sets that could be useful in their environment and requesting new sets for specific tasks. Tachyon provides the information and functions that allow their support team to get answers themselves, without the need for SCCM knowledge, and offers the reports and analytics necessary to ensure employees are productive.

As a future step, Carollo is exploring how to further leverage Tachyon's real-time data collection capability to get more accurate information. One option they're considering is using Power BI dashboards to provide Tachyon data and reporting, rather than depending on AD or SCCM data, which is often stale or outdated without manual clean-up.

Next steps are to set up 1E's Guaranteed State solution in their environment to enable better configuration management. This will enable Carollo to set rules for certain programs or processes, registry settings and xml files which would automatically revert settings back to their originally configured state should a user attempt to change them.

## Products



### Tachyon

- Configuration options to communicate with remote devices outside firewall without having to set up expensive Cloud Management Gateway
- Real-time identification and remediation of device issues



### Shopping

- Introducing a lot of new s/w moving from Novell to Microsoft and roll it out through 1E Shopping
- Employees can shop for self-service software
- Employees set up in categories so that the departments can see software that is relevant to their department or their roles.
- End users use it a lot for requests
- IT can use shop-on-behalf-of to push software installs as needed without the need to know how to use the SCCM console to push software onto new machines



### Nomad

- With few distribution points Nomad is relied upon to distribute content



### AppClarity

- True-ups from every 3 years to every year
- Usage metrics delivered and used by the reclaim agent
- Manages licencing renewals-invoicing, renewals and notifications