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Purpose of this Guide

This document is intended for new users of Email2Ticket, powered by RapidFire. It will guide you through the initial use of the software.

About Email2Ticket

Email2Ticket integration software, powered by RapidFire, provides a "Mailbox Parser" that processes incoming emails and can turn them directly into Autotask or ConnectWise tickets, or in the case of monitoring alerts from any RMM software, places alerts in a triage area in RapidFire before being turned into tickets, making your organization more efficient and eliminating alarm clutter that can overwhelm your ticketing system. Email2Ticket also includes "Mailbox Monitor," a unique email processing system that creates tickets based on the *absence* (or presence) of one or more emails that meet a criterion (e.g.- creating a ticket if a *success* email from back-up software is *not* received).

Email2Ticket - How It Works

Email2Ticket is cloud-based integration software that allows you to customize the processing of emails in a streamlined, intuitive approach. Since it is a hosted solution you do not need to dedicate, setup, and manage your own servers.

The typical use of Email2Ticket is to read your "support" email account where your customers send support requests, and automatically create new Autotask or ConnectWise tickets, or add notes (append) to existing tickets. But the flexibility of Email2Ticket allows you to do much more.

From Email2Ticket, you specify one or more Email Accounts to be checked. Each account can have multiple Schedules for the Mailbox Parser and the Mailbox Monitor, and each Schedule can have multiple rules.

The **Mailbox Parser** parses new emails and creates/appends tickets (or performs other actions) based on the rules that are matched in each Schedule.

The <u>Mailbox Monitor</u> monitors the mailbox and creates tickets (or performs other actions) based on the presence or absence of emails received in the timeframe defined by the Schedule (such as Success email alerts from a customer's backup system).

Built-in templates will get you going quickly. You can customize further with rules to determine the action(s) Email2Ticket will take for each new email:

- create tickets
- append to existing tickets
- add time entries to existing tickets
- automatically send email responses or forward email content

All of the rules are processed in the order you define, so it is possible that a single email can trigger multiple actions.



Email2Ticket Use Cases

The design of Email2Ticket gives you a simple, yet elegant and powerful way to accomplish straightforward and more advanced scenarios.

Mailbox Parser Use Cases

- Customer sends email to your support account:
 - o Create a Ticket for an existing Contact
 - Append / Add a note to an existing Ticket
 - Add new Contact to existing Account and create ticket
- Customer sends email directly to a helpdesk person. Person forwards email to support account:
 - Create a Ticket for an existing Contact using the Customer's email for matching (not your support technician!)
 - Append / Add a note to an existing Ticket
 - Add new Contact to existing Account and create ticket using Customer's Email address
- Customer sends "reply" directly to helpdesk person for Open Ticket (with ticket number in email.) Helpdesk person forwards email to support account:
 - Append / Add note to the existing Ticket
- Ignore / Suppress ticket creation
 - For "out of office" responses
 - Based on your domain or other criteria
- Forward or reply to an email
- Allow Field Engineers to create a Time Entry to existing ticket via email
- Strip out certain body text (e.g.- only keep new portion of email) before creating ticket or note

Mailbox Monitor Use Cases

- Monitor Backups. You can use Mailbox Parser (above) to create alerts when a backup failure email is
 received. But when a backup utility hangs or doesn't run, a failure email is not sent! Use Mailbox Monitor
 to check the email account to look for one or more Success email(s) in a given time period (daily, weekly,
 etc.). If the emails are not present it can create a ticket.
- Consolidate multiple alarms from an RMM system. Some Remote Monitoring/Management systems throw a lot of alarms. You could use Mailbox Monitor to check periodically (e.g.-hourly or daily) to look for one or more emails from your RMM for a specific Alarm type, for instance, Event Log, and have it create just one ticket rather than many tickets.

Email2Ticket and Your Ticketing System Workflows

Email2Ticket works WITH your Autotask and ConnectWise Workflow rules. Typically you have workflows setup so that your contact is notified via email when new tickets are created (with the ticket number in the email), and the contact is requested to reply to this workflow notification to allow the conversation to be matched to the original ticket. It is this general workflow that Email2Ticket enhances by creating tickets and appending client responses to the correct ticket.



How Email2Ticket Interfaces with Autotask

Autotask provides two sets of APIs that are used by Email2Ticket; Add Ticket E-Mail Service (ATES) and Autotask Webservice API (ATWS). Both of these APIs provide the ability to create tickets or append (add Notes) to existing tickets.

For more information about using Email2Ticket for Autotask, please download and read the "Email2Ticket for Autotask Users Guide."

How Email2Ticket Interfaces with ConnectWise

Email2Ticket connects to either ConnectWise Cloud or the premise-based ConnectWise PSA via the ConnectWise APIs. It does require that you setup an Integrator Login with appropriate permissions.

For more information about using Email2Ticket for ConnectWise, please download and read the "Email2Ticket for ConnectWise Users Guide."



Using Email2Ticket

Email2Ticket Web Interface

After logging in, the default pane is the Mailboxes tab. From here, any Parsers or Monitors you create will show in this window, along with the Mailboxes that you create those Schedules in.



Mailboxes

From this screen, you can add Mailboxes, and create Monitor and Parser schedules for each. To add a Mailbox, simply click "Add Mailbox" at the bottom of the pane.

Give the Mailbox a **Mailbox Alias**. You may also input an optional description.

Complete the form with the email login credentials and the POP3 or IMAP4 Host and port number, or RPC over HTTP/S information.

If you are using <u>**RPC over HTTP/S**</u>, make certain you enter the fully qualified URL. (If you enter mail.mycompany.com, Email2Ticket will add /ews/Exchange.asmx.)

Mailboxes > Add M	ailbox			
Mailbox Alias:				
	Enable Automatic Checking			
Description(optional):				
				\sim
Email Username:				
Email Password:				
	Show Password Text			,
Connection:	POP3			~
POP Host:				
	Use SSL			
POP Port:	110			
		Сору	Cancel	Test Connection

Note: RPC via HTTP/S is only available for Exchange 2007 and later.



Schedules

Add Mailbox Monitor Schedule

The Mailbox Monitor feature of Email2Ticket allows you to monitor a mailbox and perform actions (e.g.-create tickets) based on the presence or absence of emails in a given time period.

Mailboxes > Add N	Ionitor Schedule
Schedule Alias:	
E	Inable Automatic Checking:
Description (optional):	
CRON Builder:	Every minute
Schedule:	*****
*Select value from lis	st, enter custom value in CRON format, or use the CRON builder above.
	Add Concol
	Add Cancel

From the Home screen, click **Add Monitor Schedule** from the right sidebar menu. Provide an alias, optional description, and set the Schedule. This determines how often the rules for the Schedule will be checked.

Setting the Schedule

To set the schedule, you may either manually specify a period in CRON format

CRON Builder: Every Schedule: *Select value from list, ente	minute 5 Minutes 10 Minutes 15 Minutes 30 Minutes 6 Hours 12 Hours minute hour	-] -] - ON format, or use the CRON builder above.
	day week month year	

Build a schedule in units (default is minute).

Or choose a periodical range from the drop-down menu.

CRON Builder:	Every minute	
Schedule:	***** × •	
*Select value from I	Every Hour V fo Every 8 Hours Every 12 Hours Every Day Every Week Every Month	ormat, or use the CRON builder above.



Add Mailbox Parser Schedule

The Mailbox Parser feature of Email2Ticket parses new emails and creates/appends tickets (or performs other actions) based on the rules that are matched in each Schedule.

Mailboxes > Add	Parser Schedule			
Schedule Alias:				
	Enable Automatic Checking:			
Description (optional):				
				^
				\sim
CRON Builder				
CRON Builder.	Every minute			
Schedule:	* * * * * 			
*Select value from	list, enter custom value in CRON format, or use the CRON builder above.			
		Add	Canaal	
		Add	Cancel	

From the Home screen, click **Add Parser Schedule** from the right sidebar menu. Provide an alias, optional description, and set the Schedule. This determines how often the rules for the Schedule will be checked.

Setting the Schedule

To set the schedule, you may either manually specify a period in CRON format

CRON Builder: Every	minute	
Schedule:	5 Minutes	
*Soloct volue from list_opte	10 Minutes	 CNI format, or use the CRON builder above
Select value nonnilist, ente	15 Minutes	Controllinal, of use the Crook builder above.
	30 Minutes	
	6 Hours	
	12 Hours	
	minute	
	hour	
	day	
	week	
	month	
	year	

Build a schedule in units (default is minute).

Or choose a periodical range from the drop-down menu. *Select value from I	Every minute Every Hour Every 8 Hours Every 12 Hours Every Week Every Month N format, or use the CRON builder above.
--	--



Rules

Mailbox Monitor Rules

From the Mailbox pane, select a Mailbox Monitor Schedule and click "Manage Rules" from the right sidebar menu. From here, you may add rules, delete existing rules, and turn rules on and off depending on what actions you want enabled at a given time.

Mailboxes > Manage Rules	
Mailbox: YOUR MAILBOX	
Schedule: Email2Ticket	
With Selected: Delete Enable Disable	Add Rule Reorder Rules

Note: Rules run in the order that they are listed.



Click "Add Rule"

Rule Name			Action:	Create Ticket in Autotask using ATES (AddTicket	Email Service) Jle is triggered.	~
Description (optional):		^	Connection:	Create Ticket Append to Ticket with match:	\$body_regex("T[0-9]+\[\.0-9]+")\$	~
		~	To: Contact Email:	addticket@autotask.net \$from\$		
Criteria:			Contact Name: Subject:	\$fromname\$ \$subject\$		
Message	Body V contains V	more	Body:	\$body\$		^
Occurs: [Perform Action:	more than ♥ times ● On Success ○ On Failure					~
Regex Help		Add	Cancel			

Fill in the web form by giving the new rule a Name, optional description, specifying criteria for monitoring incoming emails, and telling Email2Ticket what action you want it to take when those criteria are met (or not, in some instances).

By having the rule look for specific "To" fields, sender information, subject lines, or body content, you have a wide range of control over what types of emails Email2Ticket will act upon.

There are a variety of Actions to choose from, some specific to Autotask or ConnectWise, detailed later in this section.

You may also add "Best Practice" rules, detailed later in this section.



Mailbox Parser Rules

From the Mailbox pane, select a Mailbox Parser Schedule and click "Manage Rules" from the right sidebar menu. From here, you may add rules, delete existing rules, and turn rules on and off depending on what actions you want enabled at a given time.

Mailboxes > Manage Rules		
Mailbox: YOUR MAILBOX		
Schedule: Email21icket		
With Selected: Delete En	nable Disable	Add Rule Reorder Rules

Click "Add Rule"

Mailboxes > Manag	e Rules > Add Rule					
Rule Name			Action:	Create Ticket in Autotask using ATES (AddTick	(et Email Service)	~
	Rule Enabled			Do not process subsequent rules if this	rule is triggered.	
Description (optional):			Connection:			~
		^		Create Ticket		
				O Append to Ticket with match:	\$body_regex("T[0-9]+\.[\.0-9]+")\$	
		~	To:	addticket@autotask.net		
			Contact Email:	\$from\$		
Criteria:			Contact Name:	\$fromname\$		
	Set Act	ivo Mindow	Subject:	\$subject\$		
	Gerner	IVE WINDOW	Body:	\$body\$		
Messag	e Body V Contains V					\sim
		more				
Occurs:	more than V times					\sim
Perform Action:	On Success On Failure					
	• •					
Regex Help						
		Add	Cancel			

Fill in the web form by giving the new rule a Name, optional description, specifying criteria for monitoring incoming emails, and telling Email2Ticket what action you want it to take when those criteria are met (or not, in some instances).

By having the rule look for specific "To" fields, sender information, subject lines, or body content, you have a wide range of control over what types of emails Email2Ticket will act upon.



After adding Rules to a Schedule, click "Enable Schedule" in the right sidebar menu from the Mailboxes page to begin running the given Schedule.

Note: You may also add "Best Practice" rules, detailed later in this section.

Best Practice Rules

The following Rules are recommended for most users, as they protect against common looping issues that can disable your instance of Email2Ticket entirely.

Suppress Out of Office

This rule will only trigger if Out of Office is in the subject of a message. It will take no action and will stop processing of other rules to avoid creating a ticket.

A complete cycle will typically involve Autotask sending a workflow notice to a customer when they create a ticket, but if Out of Office is turned on, then their reply message will potentially cause an infinite loop if not ignored.

Suppress Loop Back

This rule will trigger when the sender is the same as the recipient (both are this mailbox). It will take no action and will stop processing of other rules to avoid creating a ticket.

A complete cycle will typically involve Autotask sending a workflow notice to a customer when they create a ticket, and if the customer were this account then the workflow notice would potentially cause an infinite loop if not ignored.

To view Best Practice Rules for Autotask, please see the Autotask Users Guide.

To view Best Practice Rules for ConnectWise, please see the ConnectWise Users Guide.

Actions

Email2Ticket can perform a variety of Actions via Rules to meet a wide array of needs. While many of the available Actions are specific to Autotask or ConnectWise, those not specific to any PSA still provide a modicum of functionality.

Take No Action

Use "Take No Action" action to match items like "Out of Office" in conjunction with "Do not process subsequent rules" to avoid adding tickets or sending emails. Additionally, if you have a problematic sender, or want to restrict your email creation to only allow certain domains, the "Take no Action" option is the one to use.

Send an Email

Use the Send Email action when you want to forward contents of the original email to another mailbox, or to setup an auto-response to the email. You may use any of the Text Substitution Strings to include all or portions of the original email.

Test Rules

From the Manage Rules pane, select "Test Rules" from the right sidebar menu.

Mailboxes > Manage Rules > Test Rules			
From this form, you can test your email rules outside of your mail system. Simply fill out the email fields below. When you press the "Test" button, the email you specified will be processed through the same email system that will			
check your incoming mail and return information on which rules matched and what the resulting action is, along v	check your incoming mail and return information on which rules matched and what the resulting action is, along with all substituted values. Executing a test will not create actual tickets.		
Login to Email Account Reuleve 1 day(s) of headers			
	Trace ID:		
	Date:		
	From Address:		
	From Name:		
	To:		
	Cc:		
	Reply-To:		
	Importance:		
	Subject:		
	Body:		
			^
			\sim
		Perform Real Action	
		Test Clear	
Cancel			
- Children			

Using the Test Rules function allows you to test your rule hierarchy in a "sandbox" by simulating an email and processing it as though it had come to your mailbox. This is especially useful in diagnosing rule order errors, potential loops, or gaps in your catchall rules that are letting support emails slip though.

View Traces

Trace files are used for debugging e-mail related issues and reflect how Email2Ticket processed the actual email message. Older messages may not have trace files as traces are automatically and routinely removed.

After you have enabled a Schedule by selecting it from the Mailboxes pane and clicking "Enable Schedule" in the right sidebar menu, you will see an option to "View Traces."

Scheduled Actions

Scheduled Actions allows you to schedule the creation of tickets, or other actions, which is useful to build recurring tasks like Patch Management and Backup validation, rather than using the built-in recurring task feature of Autotask.



Scheduled Actions >	Add Folder	
Folder Name:		
	Enabled	
Description(optional):		
	^	
	~	
I	Add Cancel	

From the Schedule Actions tab on the left sidebar menu, click Add Folder to create a folder which can be used to group similar items. Select that folder in the list from the current pane and, in the right sidebar menu, click Add Scheduled Action.

Scheduled Actions >	> Add Scheduled Action Schedule
Schedule Alias	
Concourte 7 anas.	
	Enable Automatic Checking:
Description (optional)	
CRON Builder	
Schedule:	
*Select value from list	tenter custom value in CRON format, or use the CRON huilder above
	Add Cancel

There is a handy CRON builder that helps you build the schedule. Right-click in any of the boxes for convenient settings, like Every Month, Every Day, etc. (Note that if you are not filtering for a specific criteria, use "Select All.")

Once you have a schedule, you can add tasks (Create ticket, update ticket, send Email, etc.) to the schedule similar to Mailbox Parser, above.

Administration

Set Administrative Contact

Enter the email address of an administrative contact to send Error reports. Leave it blank to suppress notifications.

Manage Connections

Email2Ticket requires login or integrator credentials to interface to your PSA / ticketing system. Click "Add Connection" and supply the appropriate Account Credentials. You can also Modify or Remove accounts from this screen.

Backup Email2Ticket Configuration

We recommend that you periodically create a local back of your Email2Ticket configuration (*.e2t file). Select the Mailboxes, Schedules and Rules to back-up (or leave it all selected) and then click **Save Now** to create a backup file. Should you need anything restored, you will need to contact RapidFire Tools Support for further instructions.

Appendix I – Regular Expressions

A regular expression ("regex") is a means to communicate patterns in text to programs, and then what actions to take when it finds the respective text. A regular expression could tell a program to search for all instances of a word and then replace that with different text.

Please see the following table for reference:

Pattern	Explanation
•	Any character
*	Zero or more characters
+	One or more characters
A-Z	The ASCII characters A through Z
a-z	The ASCII characters a through z
A-z	The ASCII characters A through z
0-9	The ASCII characters 0 through 9
[abc]	The characters "a" or "b" or "c"
١	Used to indicate the next character is literal
- //	Indicates the literal "\"
١.	Indicates the literal "."
\n	Indicates a new line
()	Defines the "capture" or returned text
{#}	Where # is a number. Modifies a bracket to match a specific length (e.g. "[0-9]{4}" will only return 4 digit numbers)

Example

Regular expression allows Email2Ticket to search for ticket numbers, like this:

T[0-9]+\.[\.0-9]+



This example matches a specified text sequence contained between quote marks. Here's the same example, separated into parts:

- 1. The first character is a **T**
- 2. The next character is a number between 0 and 9. Any portion of a string contained in [square brackets] is an *or* statement, so in this case [0 *or* 1 *or* 2 *or* 3...*or* 9]
- 3. The + repeats the previous item once or more
- 4. \. means a *literal* period/dot
- 5. This item is a literal period/dot or a number between 0 and 9
- 6. The + repeats the previous item once or more

The many ways which regular expression can be used exceed the scope of this document. For more information, see the Wikipedia article on Regular Expression (<u>here</u>).

Appendix II – Text Substitution Strings

There are several "variables" that are set when an email is parsed that can be used in the Actions, and are also used in the *Text Substitution Strings*, below.

- \$from\$
- \$fromname\$
- \$to\$ (multiple "to" email addresses are concatenated with ";" with NO spaces)
- \$cc\$ (multiple "cc" email addresses are concatenated with ";" with NO spaces)
- \$subject\$
- \$body\$
- \$importance\$
- \$date\$
- \$ticketnumber\$ this is the ticket number of a ticket created, and is blank until a ticket is created by a Create Ticket action. This can then be used in subsequent rules in the Schedule to perform advanced actions, such as changing status (by adding a Note) or creating a Time Entry for a new ticket.

Here is a table of the substitution strings that may be used to create matches for specific actions:

Substitution	Definition
\$from\$	Original sender email address
\$fromname\$	Senders Name(s)
\$from_textbefore("substring")\$	Text before the specified substring in original sender email address
<pre>\$from_textbetween("substring1","substring2")\$</pre>	Text between the specified substrings in original sender email



Note: No spaces after comma	address
\$from_textafter("substring")\$	Text after the specified substring in original sender email address
\$from_regex("pattern")\$	Text matching the specified regular expression in original sender email address
\$from_regexcs("pattern")\$	Text matching the specified regular expression in original sender email address (case sensititve)
\$to\$	Sent to field
<pre>\$to_textbefore("substring")\$</pre>	Text before the specified substring in sent to field
<pre>\$to_textbetween("substring1","substring2")\$ Note: No spaces after comma</pre>	Text between the specified substrings in sent to field
<pre>\$to_textafter("substring")\$</pre>	Text after the specified substring in sent to field
\$to_regex("pattern")\$	Text matching the specified regular expression in sent to field
<pre>\$to_regexcs("pattern")\$</pre>	Text matching the specified regular expression in sent to field (case sensititve)
\$cc\$	Cc field
<pre>\$cc_textbefore("substring")\$</pre>	Text before the specified substring in Cc field
<pre>\$cc_textbetween("substring1","substring2")\$ Note: No spaces after comma</pre>	Text between the specified substrings in Cc field
<pre>\$cc_textafter("substring")\$</pre>	Text after the specified substring in Cc field
<pre>\$cc_regex("pattern")\$</pre>	Text matching the specified regular expression in Cc field
\$cc_regexcs("pattern")\$	Text matching the specified regular expression in Cc field (case sensititve)
\$subject\$	Subject field
<pre>\$subject_textbefore("substring")\$</pre>	Text before the specified substring in Subject field
<pre>\$subject_textbetween("substring1","substring2")\$ Note: No spaces after comma</pre>	Text between the specified substrings in Subject field
<pre>\$subject_textafter("substring")\$</pre>	Text after the specified substring in Subject field
\$subject_regex("pattern")\$	Text matching the specified regular expression in Subject field





\$subject_regexcs("pattern")\$	Text matching the specified regular expression in Subject field (case sensititve)
\$body\$	Body field
<pre>\$body_textbefore("substring")\$</pre>	Text before the specified substring in Body field
<pre>\$body_textbetween("substring1","substring2")\$ Note: No spaces after comma</pre>	Text between the specified substrings in Body field
<pre>\$body_textafter("substring")\$</pre>	Text after the specified substring in Body field
\$body_regex("pattern")\$	Text matching the specified regular expression in Body field
\$body_regexcs("pattern")\$	Text matching the specified regular expression in Body field (case sensititve)
\$body_line(n)\$	Line <i>n</i> of the original email
\$body_lines(2)\$	Returns line 2 and all lines after 2
\$body_lines(2,4)\$	Returns lines 2, 3, and 4
\$body_beforeregex("myexpr")\$	Returns all text before the pattern matching
\$body_beforeregexcs("myexpr")\$	Returns all text before the pattern matching Case sensitive
<pre>\$body_betweenregex("myexpr1","myexpr2")\$ Note: No spaces after comma</pre>	Returns all text between the specified pattern matchings
<pre>\$body_betweenregexcs("myexpr1","myexpr2")\$ Note: No spaces after comma</pre>	Returns all text between the specified pattern matchings - Case sensitive
<pre>\$body_afterregex("myexpr")\$</pre>	Returns all text after the pattern matching
<pre>\$body_afterregexcs("myexpr")\$</pre>	Returns all text after the pattern matching Case sensitive
\$importance\$	Some call it Priority - High Low Normal
\$date\$	Default format: 6/30/2011 8:46:16 AM
\$date("format")\$	See Reference Site: <u>http://www.csharp-examples.net/string-format-datetime/</u>



Appendix III - CRON Scheduling Format

CRON is a Unix based time format which can be used to specify a time schedule for Email2Ticket to check a mailbox for new messages.

The basic format is broken into 5 sections, which are as follows:



Email2Ticket requires a space between each of the 5 sections, and the * character is a wildcard which has it run at every available interval.

As example, if you wanted to run at 7:00AM Monday through Friday only, you could have:

07**1-5

Or if you wanted to run every minute, you could have:

* * * * *

Or if you wanted to check on the first day of every month at midnight, you could have:

001**