

Case: 02169021

Case Header

Subject	Wilcoxon Matched Pairs Test approximation
Status	Closed
Priority	Low
Product	TIBCO Statistica
Product Version	14.0.1
Account Name	Institute of Experimental Medicine, HAS
Case Contact	Boldizsar Balog
Email CC List	balog.boldizsar@koki.hu
Case Owner	Rohit Mohan Bansode
Resolution Summary	Case closed by customer- Statistica uses the approximate method in Wilcoxon Matched Pairs Test approximation. At this time there is no setting in Statistica to force either the use of Exact or Approximate methods. Asked customer to create an idea on enhancement portal.
Date Opened	3/6/2023 1:17 PM
Date/Time Closed	4/24/2023 6:56 AM
Description	The results of Statistica program Wilcoxon Matched Pairs Test are different then the result I get with Matlab and R. I attached the values I calculated with different methods below. Is there a setting for getting the same results as I get with Matlab and R? What is the difference between the two calculation methods yielding different results? Best regards, Boldizsar Balog p values Statistica Wilcoxon Matched Pairs Test = 0.0431 Matlab signrank results with method 'approximate' = 0.0431 R wilcox.test results with exact=F, correct=F = 0.0431 manual Excel calculation with normdiff function = 0.0431 Matlab signrank results with method 'exact' = 0.0625 R wilcox.test results with exact=T, correct=T = 0.0625 calculation of a webpage (https://www.statkingdom.com/175wilcoxon_signed_ranks.html) = 0.0625

Case Comments

Created By TIBCO Support
Created Date 2023/04/22 09:15

Subject Resolution/Pending Confirmation for Case #02169021

Email Message



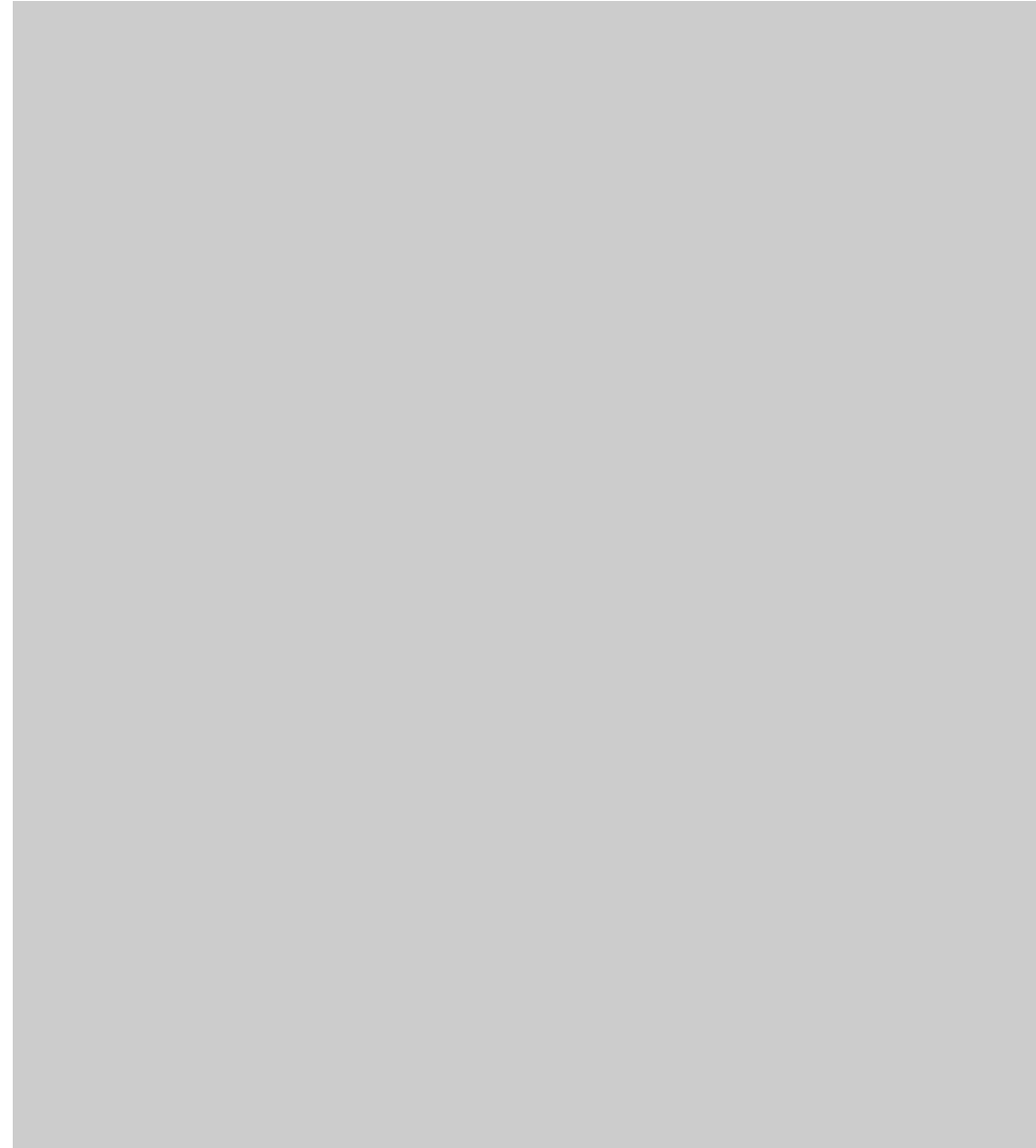
Hello Boldizsar,

This is a reminder that a resolution has been provided for case 02169021 and is waiting for confirmation from you.

To confirm that this case has been resolved, or if you continue to need assistance, please reply to this email or provide an update on the Support Portal. You may also close this case yourself using the **Close Case** button on the **Case Details** screen of the Support Portal. If you do not close the case yourself or update the case in the next 3 days, it will be auto-closed.

Link: <https://support.tibco.com/s/case/5004z00001n2TPz>

Please see details below:



Case #: 02169021

Customer: Institute of Experimental Medicine, HAS

Contact: Boldizsar Balog

Subject: Wilcoxon Matched Pairs Test approximation

Description: The results of Statistica program Wilcoxon Matched Pairs Test are different then the result I get with Matlab and R. I attached the values I calculated with different methods below.

Is there a setting for getting the same results as I get with Matlab and R?
What is the difference between the two calculation methods yielding different results?

Best regards,
Boldizsar Balog

p values

Statistica Wilcoxon Matched Pairs Test = 0.0431

Matlab signrank results with method 'approximate' = 0.0431

R wilcox.test results with exact=F, correct=F = 0.0431

manual Excel calculation with normdiff function = 0.0431

Matlab signrank results with method 'exact' = 0.0625

R wilcox.test results with exact=T, correct=T = 0.0625

calculation of a webpage

(https://www.statskingdom.com/175wilcoxon_signed_ranks.html) = 0.0625

Resolution Summary: Statistica uses the approximate method in Wilcoxon Matched Pairs Test approximation. At this time there is no setting in Statistica to force either the use of Exact or Approximate methods. Asked customer to create an idea on enhancement portal.

Regards,

TIBCO Support

ref:_00D1aIm8Z._5004z1n2TPz:ref

Created By support@tibco.com
Created Date 2023/04/20 09:03
Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation
Email Message Hello Boldizsar,

We appreciate your patience.

Here are the answers to your questions:

1) The Wilcoxon Matched Pairs Test in Statistica assumes a normal distribution of the statistic when calculating the p-value. -**Yes**

2) The p-values are calculated with the formula I attached now, which can be seen on the MATLAB documentation page (<https://www.mathworks.com/help/stats/signrank.html>)

- **Yes, we calculate our Z statistic using the same formula and it is used for arriving at the displayed p-value. One thing to note is that rather than using an adjustment for ties as shown in the Matlab docs, we remove ties altogether - which you'll see reflected in the total N produced in the spreadsheet**

3) If 2) is not true, please send me the formula you use, if possible! **N/A**

4) It does not apply a continuity correction and it does not use the method described by Bauer (1972) <https://doi.org/10.2307/2284469>, which leads to the "exact" p-values of this test.

No continuity correction, no methods used to calculate exact p values

Best Regards,
Rohit Bansode
Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.
<https://support.tibco.com>

Check out our community:



ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By Boldizsar Balog
Created Date 2023/04/19 12:23

Comment Type:Customer Update-
Hello Rohit,
Is there any progress with this case?

Regards,
Boldizsar

Created By Boldizsar Balog
Created Date 2023/04/11 10:10

Comment Type:Customer Update-

Hello Rohit,

Thank you for your answer.

I work in a research group where a part of the group regularly uses Statistica to do statistical analysis, that is why we bought a license. The other part of the group use other statistics alternatives for statistical analysis. The job of a researcher includes understanding the methods and softwares he uses. The original problem, I opened this case for was that I wanted to understand the exact method of p value calculation of your software.

We are not doing a statistics comparison project. Personal curiosity plays a role, but the main reason is, that I want to understand a mismatch of a value, that should be the same.

Regards,
Boldizsar

Created By support@tibco.com
Created Date 2023/04/11 09:55

Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message Hello Boldizsar,

We can provide the best answers to you but the asked information might be TIBCO intellectual property.

Could you please let us know the purpose of your question? Are you citing Statistica in a research project?

Are you doing a project comparing different software under different conditions? Personal curiosity, etc.

Best Regards,

Rohit Bansode

Associate Support Engineer

TIBCO Analytics Support

TIBCO Software Inc.

<https://support.tibco.com>

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Created By support@tibco.com
Created Date 2023/04/06 11:37
Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation
Email Message Hello Boldizsar,

We appreciate your patience. Our engineering team is still working on the case. Will update you as soon as we receive any updates from them.

Best Regards,

Rohit Bansode

Associate Support Engineer

TIBCO Analytics Support

TIBCO Software Inc.

<https://support.tibco.com>

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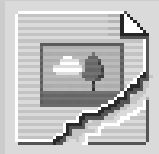
ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By support@tibco.com
Created Date 2023/03/31 11:43
Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation
Email Message Hello Boldizsar,

We are discussing your concerns internally. Will get back to you once we have an update from the engineering team.

Best Regards,
Rohit Bansode
Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.
<https://support.tibco.com>

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ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By Boldizsar Balog
Created Date 2023/03/29 06:59
Comment Type:Customer Update-
Hello Rohit,

Thank you for your answer. Please confirm my thoughts on this case!

1) The Wilcoxon Matched Pairs Test in Statistica assumes normal distribution of the statistic when calculating the p-value.

2) The p-values are calculated with the formula I attached now, that can be seen on the MATLAB documentation page (<https://www.mathworks.com/help/stats/signrank.html>).

3) If 2) is not true, please send me the formula you use, if possible!

4) It does not apply a continuity correction and it does not use the method described by Bauer (1972) <https://doi.org/10.2307/2284469> , that leads to the "exact" p-values of this test.

Regards,
Boldizsar

Created By support@tibco.com
Created Date 2023/03/28 15:49

Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message Hello Boldizsar,

We have an update from the engineering team. Statistica uses the approximate method in Wilcoxon Matched Pairs Test approximation. At this time there is no setting in Statistica to force either the use of Exact or Approximate methods.

If you would like this enhancement to be added in future versions, we can consider it for future releases. You can create an enhancement request for this. We are pleased to let you know about an improved method to make it easier for TIBCO Statistica users to report enhancement ideas, track the status of those enhancements, and vote for ideas/enhancements that you consider to be most useful. This will be done by using the Ideas Portal that was developed by our Product Management team.

Please go to <https://ideas.tibco.com/?project=STAT>

This will be a more effective way for you to interface directly with our product team and see the status of your enhancement ideas. Please acknowledge your understanding of using the Statistica Ideas Portal to register this enhancement request.

You can read more about this process here:

<https://community.tibco.com/s/article/Introduction-to-the-TIBCO-Ideas-Portal>

Best Regards,

Rohit Bansode
Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.
<https://support.tibco.com>

Check out our community:



ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By support@tibco.com
Created Date 2023/03/27 09:34
Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation
Email Message Hello Boldizsar,

We understand your business needs. We have taken follow-up on this issue with the engineering team. We will update you as soon as we get a response from the team.

Best Regards,
Rohit Bansode
Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.
<https://support.tibco.com>

Check out our community:



ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By Boldizsar Balog
Created Date 2023/03/27 07:33

Comment Type:Customer Update-

Hello Rohit,

Is there any progress with this case?

Regards,
Boldizsar

Created By support@tibco.com
Created Date 2023/03/21 07:49

Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message Hello Boldizsar,

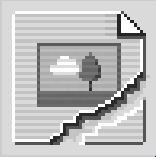
We are discussing this issue internally with our engineering team.

Will get back to you with an update soon.

Best Regards,

Rohit Bansode
Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.
<https://support.tibco.com>

Check out our community:



ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By Boldizsar Balog
Created Date 2023/03/20 16:10

Comment Type:Customer Update-

Hello Rohit,

Is there any progress with this case?

Regards,
Boldizsar

Created By support@tibco.com
Created Date 2023/03/14 15:07

Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message

Hello Boldizsar,

We have asked our engineering team to look into the issue.

And we'll inform you once we have an update from the team.

Best Regards,

Rohit Bansode

Associate Support Engineer

TIBCO Analytics Support

TIBCO Software Inc.

<https://support.tibco.com>

Check out our community:



ref:_00D1alm8Z._5004z1n2TPz:ref"

Created By	Rohit Mohan Bansode
Created Date	2023/03/14 14:18
Comment	Type:Support Update- Meeting Minutes: Attendees: Boldizsar, Rohit, Monali. Glimpses: We take sample data in a Statistica spreadsheet. Checked the P value results in R, Matlab, and Statistica-Wilcoxon matched pair test. On an online website (statskingdom.com) we performed the Wilcoxon signed-rank test. In it we choose the p computation method as approximate it showed the same p values in Statistica, Matlab, and R. And if we choose the method "Exact" it

shows different results with Statistica.

Next steps: I will replicate the issue. And investigate more on "which method is by default set in Statistica Wilcoxon matched pair test"

Created By support@tibco.com
Created Date 2023/03/14 08:56

Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message Hello Boldizsar,

Here's the meeting link:

<https://tibco.zoom.us/j/95180523433?pwd=SytqZEh5THYwL2NudENpVkh5cHg5QT09>

Meeting ID: 951 8052 3433

Passcode: 562195

Time: 10:30 AM CET

Best Regards,

Rohit Bansode

Associate Support Engineer

TIBCO Analytics Support

TIBCO Software Inc.

<https://support.tibco.com>

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ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By Boldizsar Balog
Created Date 2023/03/13 13:35

Comment Type:Customer Update-

Dear Rohit Bansode,

Yes, we can 10:30 would be perfect for me.

Regards,
Boldizsar

Created By support@tibco.com
Created Date 2023/03/13 13:17

Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message Hello Boldizsar,

To discuss this issue can we have a web meeting tomorrow?

I am available from 10:30 AM - 3 PM CET.

Let me know if it works for you.

Best Regards,

Rohit Bansode
Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.

<https://support.tibco.com>

Check out our community:



ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By Boldizsar Balog
Created Date 2023/03/13 09:26

Comment Type:Customer Update-

Dear Rohit Bansode,

I attached files I exported from Statistica again. If you need another file, please tell me how to export it.

Regards,
Boldizsar

Created By TIBCO Support
Created Date 2023/03/12 09:45

Subject (Case_ID:02169021): Waiting for customer response

Email Message



Reminder: Case #02169021 waiting for customer response

Hello Boldizsar,

This is a reminder that case 02169021 is waiting for additional information from you.

If you continue to need assistance with this case, please add a comment to the case on the Support Portal or reply to this email with the requested information. Attachments larger than 10MB must be uploaded to the case from the Support Portal (from the Attachments section of the case).

Link: <https://support.tibco.com/s/case/5004z00001n2TPz>

Please see details below:

Case #: 02169021

Customer: Institute of Experimental Medicine, HAS

Contact: Boldizsar Balog

Subject: Wilcoxon Matched Pairs Test approximation

DESCRIPTION:

The results of Statistica program Wilcoxon Matched Pairs Test are different then the result I get with Matlab and R. I attached the values I calculated with different methods below.

Is there a setting for getting the same results as I get with Matlab and R?

What is the difference between the two calculation methods yielding different results?

Best regards,

Boldizsar Balog

p values

Statistica Wilcoxon Matched Pairs Test = 0.0431

Matlab signrank results with method 'approximate' = 0.0431

R wilcox.test results with exact=F, correct=F = 0.0431

manual Excel calculation with normdiff function = 0.0431

Matlab signrank results with method 'exact' = 0.0625

R wilcox.test results with exact=T, correct=T = 0.0625

calculation of a webpage (https://www.statskingdom.com/175wilcoxon_signed_ranks.html)
= 0.0625

LAST UPDATE:

Hello Boldizsar,

Could you please share the data-embedded workspace?

Best Regards,

Rohit Bansode

Associate Support Engineer

TIBCO Analytics Support

TIBCO Software Inc.

<https://support.tibco.com> <<https://support.tibco.com>>

Check out our community:

[Inline image URL :

https://community.tibco.com/sites/all/themes/tibco_community/assets/images/logo.svg]

<<https://community.tibco.com/answers/product/904061>>ref:_00D1alm8Z._5004z1n2TPz:ref

Regards,

TIBCO Support

ref:_00D1alm8Z._5004z1n2TPz:ref

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"

Created By	support@tibco.com
Created Date	2023/03/10 09:41
Subject	NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation
Email Message	Hello Boldizsar,

Could you please share the data-embedded workspace?

Best Regards,

Rohit Bansode

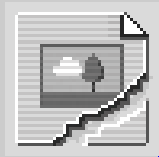
Associate Support Engineer

TIBCO Analytics Support

TIBCO Software Inc.

<https://support.tibco.com>

Check out our community:



ref:_00D1aIm8Z._5004z1n2TPz:ref"

Created By support@tibco.com
Created Date 2023/03/09 14:30
Subject NOTIFICATION: New Public Update (Case_ID:02169021): Wilcoxon Matched Pairs Test approximation

Email Message Hello Boldizsar,

Thank you for contacting TIBCO Statistica Support. We have received your request and are currently looking into the attachments. We will require some time to investigate the same.

We will get back to you with an update soon.

Best Regards,

Rohit Bansode

Associate Support Engineer
TIBCO Analytics Support
TIBCO Software Inc.

<https://support.tibco.com>

Check out our community:



ref:_00D1alm8Z._5004z1n2TPz:ref"

Created By Ritu Walia
Created Date 2023/03/09 12:58

Comment Type:Support Update-

Hello Boldizsar,

Our Renewals team have confirmed that you should be coming directly to us for support. I've gone and updates your account and am releasing this case and an engineer will be in touch shortly.

Kind regards,

Ritu Walia
L1 Support Manager, TIBCO

Created By TIBCO Support
Created Date 2023/03/08 13:30

Subject Resolution/Pending Confirmation for Case #02169021

Email Message



Hello Boldizsar,

This is a reminder that a resolution has been provided for case 02169021 and is waiting for confirmation from you.

To confirm that this case has been resolved, or if you continue to need assistance, please reply to this email or provide an update on the Support Portal. You may also close this case yourself using the **Close Case** button on the **Case Details** screen of the Support Portal. If you do not close the case yourself or update the case in the next 3 days, it will be auto-closed.

Link: <https://support.tibco.com/s/case/5004z000001n2TPz>

Please see details below:

Case #: 02169021

Customer: Institute of Experimental Medicine, HAS

Contact: Boldizsar Balog

Subject: Wilcoxon Matched Pairs Test approximation

Description: The results of Statistica program Wilcoxon Matched Pairs Test are different then the result I get with Matlab and R. I attached the

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Best regards,
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calculation of a webpage
(https://www.statskingdom.com/175wilcoxon_signed_ranks.html) = 0.0625
Resolution Summary: NA

Regards,

TIBCO Support

ref:_00D1aIm8Z._5004z1n2TPz:ref

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"

Created By Gokul Ramaswamy
Created Date 2023/03/06 13:29

Comment Type:Support Update-

Hello Boldizsar,

Thank you for contacting TIBCO Support.

Our records indicate that your company does not have a direct maintenance agreement signed with TIBCO. Your maintenance agreement is with our partner, therefore, we will not be able to process your case.

Please contact STATSOFT HUNGARY LTD directly for assistance.

<http://www.statsoft.hu> | +36 12350524

If you have any further questions on the terms of support, please contact the TIBCO Maintenance Renewals team: renewals@tibco.com.

Thank you for your cooperation.

Kind regards,
Gokul
L1 Support, TIBCO.

Created By Customer Support
Created Date 2023/03/06 13:17

Subject (Case_ID:02169021)(ref:_00D1aIm8Z._5004z1n2TPz:ref): Case Received from Portal

Email Message



Hello Boldizsar Balog,

Thank you for contacting us - a support case has been created for you. Here are the details:

Case #: 02169021

Subject: Wilcoxon Matched Pairs Test approximation

Severity: 3 - Medium

Priority: Low

Description: The results of Statistica program Wilcoxon Matched Pairs Test are different then the result I get with Matlab and R. I attached the values I calculated with different methods below.

Is there a setting for getting the same results as I get with Matlab and R?

What is the difference between the two calculation methods yielding different results?

Best regards,
Boldizsar Balog

p values

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manual Excel calculation with normdiff function = 0.0431

Matlab signrank results with method 'exact' = 0.0625

R wilcox.test results with exact=T, correct=T = 0.0625

calculation of a webpage (https://www.statskingdom.com/175wilcoxon_signed_ranks.html) = 0.0625

Remaining Cases:

*If you have no incident limit above will be blank

To provide an update on this case, you may reply to this email or add a comment to the case on the Support Portal: <https://support.tibco.com/s/case/5004z00001n2TPz>

Attachments larger than 10MB must be uploaded to the case from the Support Portal (from the Attachments section of the case).

Please contact us via chat or phone if you wish to increase the priority/severity of your case

Regards,
TIBCO Support

