

Proof Sketch: Indirect Communication from Party A to B is NOT contempt in some cases and can be foiled with malicious eavesdropping

Consider communicating party A

Consider party B is a protected party by a “protection order”. A is told not to communicate with B by “judicial order”. In other words, A cannot send email to B.

Case 1a(no warning): Party D sends email to Party B not knowing there is a judicial order that restricts communication because Party D was not informed by legal notice or proper service. No court can inform the “world” that B should be protected since Party D is not involved in the judicial order. Earlier A sent email to D. If A's email is sent to B through D, there is a violation of the order.

Case 1b(warning): Party A is blamed for Party D's actions. Party D was not informed recall so A may be blamed. (If D was malicious or Byzantine, D could be found guilty of contempt). Otherwise, A must tell all parties of the judicial order, its restrictions, which otherwise would not be needed when communicating by email to outside parties. If D is warned not to send to B, there would be a warning in the email and possibly no violation/communication between parties.

Consider Party C eavesdrops on communication from party A to party D a third party.

Case 2: Consider Party C. Assume Party C is a system administrator that can eavesdrop. We now assume, Party D was informed that Party B is protected.

Party D does not send the email to Party B because the court “told the world” which is impractical. However, Party C is malicious and was eavesdropping on Party A to D's communication. Party C sends the email to Party B and pretends to be Party D by impersonating party D. System Administrators can impersonate other users to perform tasks. This is allowed in Unix Systems.

It now appears Party A violated “the order” but in fact there was a malicious intruder Party C that was eavesdropping and impersonating. Because of this aspect, Party A can be blamed for C's actions or Party D can be blamed for actions because party D was informed (but C sent it). Nonetheless, Party C is responsible for the contempt and remains cloaked or anonymous. C can also remove warnings if C is malicious, thus blaming A (or D).

Conclusion: Indirect communication channels cannot be enforced by judicial orders in email systems due to Byzantine eavesdropping, impersonation, and third party actions that can occur. An investigation MUST occur with evidence that otherwise is prima facie. Furthermore, authentication by as an “email address” alone is not sufficient. Impersonation can cause problems. Moreover, a single email account can have multiple owners thus authentication cannot be guaranteed by an email address. Further, there is no guarantee that party A has not been hacked by party C.

Judges must determine if contempt evidence carried over to the Court for misdemeanors was surrendered by an individual that falls into three categories: 1) stupid 2) malicious or 3) hoodwinked. This can affect the decision on where the contempt belongs when the evidence is incorrect. An investigation can assist in this case.

TRIVIAL ANALYSIS

CASE 1

$A \rightarrow B$

$A \rightarrow D \rightarrow B$ X

OR

$A \xrightarrow{\boxed{D \rightarrow B}} D \rightarrow B$ X

$A \xrightarrow{D \rightarrow B} D$ B ✓

CASE 2:

$A \rightarrow D$
|
 $C = D \rightarrow B$ X

$A \xrightarrow{D \rightarrow B} D$
|
 $C = D \rightarrow B$ X

$A \xrightarrow{D \rightarrow B} D$
|
 $C = D$ B ✓

CAUSED
by
UNKNOWN
PARTY
C

TRIVIAL ANALYSIS (2)

CASE 1

$$\begin{aligned} A &\not\rightarrow B \\ A &\not\rightarrow B' \\ A &\not\rightarrow B'' \end{aligned}$$

a) $A \rightarrow D \rightarrow B$
 $D \rightarrow B'$
 $D \rightarrow B''$ X

b) $A \xrightarrow{\substack{\rightarrow B \\ \rightarrow B' \\ \rightarrow B''}} D \rightarrow \begin{matrix} B \\ B' \\ B'' \end{matrix}$ X
 Ambiguity warning retained or NOT from $D \rightarrow B$

c) $A \xrightarrow{\rightarrow B, B', B''} D$ B or B' or B''
 $A \xrightarrow{\rightarrow B, B', B''} E$
 $A \xrightarrow{\rightarrow B, B', B''} F$ ✓

CASE 2

$$\begin{aligned} A &\not\rightarrow B \\ A &\not\rightarrow B' \\ A &\not\rightarrow B'' \end{aligned}$$

a) $A \xrightarrow{\substack{\text{warning} \\ \rightarrow B, B', B''}} D \xrightarrow{\substack{\text{Remove} \\ \text{warning}}} B \text{ or } B' \text{ or } B''$ X (MALICE)

b) $A \xrightarrow{\rightarrow B, B', B''} D \xrightarrow{A \rightarrow B, B', B''} B \text{ or } B' \text{ or } B''$ X

MALICE CASE appears to be CASE 1 a) but NOT PRIMA-FACIE